

**THE**

# Embalmers Supply



**COMPANY**



**CATALOG**





# Executive Offices (U.S.) and Laboratories

5 Colton Road, East Lyme, CT 06333  
860 739-4200  
Fax: 860 739-4204

## **Subsidiaries:**

PORTI-BOY  
5 Colton Road, East Lyme, CT 06333  
860 739-4208  
Fax: 860 739-4204

## **To Our Customers**

As a Funeral Director and/or Embalmer you are important to us. We are most appreciative of the confidence you have demonstrated by favoring us with your orders. We will continue to strive to constantly improve our embalming chemicals and chemical sundries to meet your high standards.

This continuing striving for ever better chemical products continues an ESCO reputation that began in 1886, for meeting the constantly changing needs of the Funeral Service Profession. Your ESCO Salesman will do his best to see that you get exactly what you want in a reasonable period of time. Give him a chance to tell his story...it can prove to be of real value to you.

**If you need to call for fast service, use our Toll-free WATS line U.S. Call: 1-800-243-6104.**





# Forward

**The chemical items listed** and illustrated in this catalog are designed, prepared and sold for use on the dead only. They should not be used on the living under any circumstances except for such substances as the soaps and cleaners illustrated.

**Since embalming chemicals** are strong preservatives, they are by their nature, generally irritants to the skin of the living and extremely dangerous if swallowed. Extreme care should be taken to prevent unauthorized access to any such chemicals. They *must* be kept out of the reach of children who might be too young to read, or might not understand what they did read on the label.

**We strongly suggest** that all empty containers be thoroughly rinsed with water before being discarded...and that any plastic containers be crushed before disposal to prevent accidental use.

**Under no circumstances** should any of these products be transferred to other containers. Lack of label or similarity of container to edible products might lead to accidents.

Every bottle of ESCO Chemicals being sold today that contains formaldehyde has the warning below as part of the label for the protection of all.

---

## WARNING

Embalming Chemicals should be considered harmful to living tissue. Avoid continuous contact with skin or breathing vapor. Hazardous if swallowed. Keep out of the reach of children.

Danger! contains formaldehyde and methanol. May be fatal if swallowed or absorbed through skin, harmful if inhaled may cause blindness if ingested, causes severe eye burns, causes irritation and may cause allergic skin or respiratory irritation possible cancer hazard: Contains formaldehyde which animal data indicates may cause cancer.

---





# ESCO Chemicals

**L**ike most competitors, ESCO differentiates between its chemicals on a usage basis into Drainage, Arterial and Cavity. We further break them down into three broad groups to help the Funeral Director and Embalmer in selecting the most suitable chemicals for a specific case. Existing research and thorough field testing of every ESCO Chemical are your assurance of the finest embalming chemicals you can buy!

**Triple-Base Chemicals** contain Bacterin, and Dextrin in addition to formaldehyde. Most contain Lanolin. Each base is present in sufficient quantity to alone preserve the body. ESCO “Pro” Line, EPIC Line and “C” Line are all triple-base fluids.

**Special Application Chemicals** have, as the name implies, special purposes in which they do an outstanding job on a particular case. EPIC Conditioner, as an example, is a Humectant, Plasticizer, Preservative and Anti-Dehydrant. Another example is Sofner, a Blood-Liquifying and Mineral Sequestering Agent, which will destroy blood clots. These chemicals will help our skills do an outstanding job on many tough cases.

**Less sophisticated chemicals** were developed for the large volume user of fluids and are somewhat lower in price than our other chemicals. The Compo line and ESCO Special line fluids are in this category. ESCO offers a wide selection of chemicals to help you prepare any case, regardless of problems, in the most professional manner possible.





# ESCO's Background

The Embalmers' Supply Company was born April 13, 1886, as a partnership between C.B. Dolge, a German-born inventor, a businessman, artist and engraver, and Max Huncke, also German-born, and a practicing pharmacist. It operated both as the The Brooklyn Embalming Fluid Company and as Dolge & Huncke in Brooklyn, New York, until 1890, at which time it moved to Westport, Connecticut. In 1893, the partnership was dissolved, the interest of Mr. Huncke being purchased by Mr. Dolge, and the firm was incorporated under the present name.

In the early days, we manufactured not only embalming fluids containing arsenic (there was no formaldehyde available then), but also a limited line of instruments and accessories such as pumps, goosenecks, etc., in short, the mechanical contrivances without which embalming cannot be practiced. This was necessary since there was no other source of supply for such items, and without them, fluid could not be sold. As the years have passed, we have, bit by bit, withdrawn from metal manufacture and have broadened and enlarged our chemical business. Today, we are strictly a chemical firm.

In 1889, Mr Dolge founded the first permanent school of embalming to popularize the method and his products, and this was known as the United States College of Embalming. Dr. Auguste Renouard was the demonstrator, and later purchased the school which was then run as the Renouard Training School for Embalmers until 1954, when it was absorbed by the American Academy, McAllister Institute.

Thus, within three years of its founding, the Company was already responsible for two major "firsts." An equipment factory and a permanent school, one of which operates to this day. This early record of initiating lasting improvements in the industry has guided us throughout the years and is perhaps the most distinguishing mark of ESCO. It is impossible to list all of the advances in materials and methods which we have introduced, but a partial list is given here:





## Milestones Introduced by the Embalmers' Supply Company

- 1887– FIRST American-made instruments and accessories. Prior to this, all embalming products were imported from Germany or made by the user.
- 1889– FIRST USA School of Embalming, The United States College of Embalming in New York City, which became the Renouard Training School of Embalmers' and now the American Academy, McAllister Institute in New York City.
- 1891– FIRST Commercial Compound-Base Fluid (Arsenic, Mercury and Zinc: Optimum), Formaldehyde was not yet available.
- 1898 – FIRST Imported Gallon Commercial Formaldehyde to enter USA from Germany.
- 1900 – FIRST U.S. Made Commercial Formaldehyde Fluid, ESCO non-poisonous.
- 1903 – FIRST U.S. Manufactured Morgue Table.
- 1907 – FIRST Concentrated Fluids: ESCO-RA-CO
- 1916 – FIRST Veinous Embalming, introduced VEINO Vascular Embalming.
- 1921 – FIRST Manufacture Plastic Surgery Outfit.
- 1924 – FIRST Introduce Double Base Fluid, DUO-RA-CA.
- 1926 – FIRST Produce Preservative Pre-Injection DUO-ESCHOL.
- 1930 – FIRST Invent and Introduce Liquid Tissue Filler. #20
- 1935 – FIRST Use of Synthetic Wetting Agents in Fluids.
- 1935 – FIRST Application of Synergistic Principle in Embalming fluid.
- 1938 – FIRST Water-Soluble Cosmetic, Blemish Cover.
- 1939 – FIRST Plastic Tubes.
- 1941 – FIRST Plastic Burial Garments
- 1943 – FIRST Use of Synthetic Tanning Materials (Syntans) ESCO-LECO.
- 1945 – FIRST Water and oil or Fat Soluble Dyes used in Fluid. CIRCOL, CIRCART.
- 1945 – FIRST Preservative Anti-Dehydrant, CELTROL.
- 1949 – FIRST Calcium Sequestering Blood Clot and Water Softener.
- 1951 – FIRST Arterial Fluid Capable of Firming All Cases, FIRM-M-OL.
- 1951 – FIRST Aerosol Package in Industry, SAN VEINO.
- 1956 – FIRST Anti-Dehydrant Eye Disinfectant, "IT."
- 1956 – FIRST Water-soluble Tissue Filler. #16





1957 – FIRST Powdered Incision Sealer.  
 1957 – FIRST Granulated Dust Free Hardening Compound.  
 1958 – FIRST Make over of ESCO-LECO to a Non Corrosive NU-LECO.  
 1959 – FIRST Phenol Based Cavity Fluid.  
 1960 – FIRST Tried powdered Concentrated Fluid.  
 1961 – FIRST Silicon Spray to industry.  
 1963 – FIRST Introduction of EPIC LINE – Better penetration fluid.  
 1965 – FIRST Introduction of DRUG AND STAIN REMOVER  
 1966 – FIRST Introduction of ARON ALPHA to industry.  
 1968 – FIRST Desiccating Powder used at skin banks.  
 1969 – FIRST Plastic Fluid Bottle.  
 1974 – FIRST Introduction of the PRO LINE. Max. Penetration & Color.  
 1975 – FIRST 4th Generation as New President of ESCO  
 1975 Porti-Boy purchased and added to ESCO family of products.  
 1981 – FIRST 5th Generation started working for ESCO.  
 1982 – FIRST Safety Cap on Fluid Bottles  
 1985 – FIRST Embalming Room Air Purifier marketed.  
 1987 Moved to Stratford, CT from Westport after 83 years.  
 1989 Purchased Assets of Gold Crest Chemical Company  
 1990 Introduced the first EPA licensed disinfectant for killing HIV:SCOFF II  
 1993 Introduced our own line of Cremation Urns  
 1993 Introduced NU-IT Embalmers spray to line of products  
 1994 Introduced LEAF Plus to Arterial Fluid Line  
 1994 Introduced Soft Skin to line of products  
 1997 Introduced C.S.D. a disinfectant that kills TB  
 1998 Introduced Dis-Cide EPA registered virucidal moist towelettes  
 1999 Introduced Dry-N-Lock absorbents  
 1999 Introduced Edema-Pro Edema fluid  
 2000 Introduced Disinfectant Soap and Balma #3 Soap  
 2002 Introduced Cadisol Gel  
 2007 Moved to present location in East Lyme, CT

*The Embalmers' Supply Company has produced dozens of new products, which are combinations or blends and though they are exciting additions to the ESCO lines, we have chosen not to list them all. Be assured that ESCO has always striven (and will continue) to be the innovator, not the imitator, and remains aggressive and constructive today and in the future.*





# Drainage Chemicals

The ESCO family of Drainage Chemicals, (Pre-inject) is the premium chemical in the industry. All are formulated to promote, aid, and increase blood drainage from the case by chemical action rather than physical forcing of the blood. They are non-coagulative under all conditions and non-astringent to the smallest of vessels. They are designed to sequester Calcium in the blood whether the blood is liquid, or semi-liquid. They will not adversely affect the corpuscles, blood vascular system, or any Arterial fluids. They are isotonically balanced to break up clots, as well as, lubricate and dilate the vessel walls; there is no detectable volume in tissue. With the use of ESCO Drainage chemicals one will receive the greatest possible removal and dissolving of all medicinal drugs, minerals, and all the chemicals utilized in the treatment of disease.





# Drainage Chemicals

## PRIMER

Triple-base fluid formulated to sequester Calcium at maximum levels—50% more than any other product—even in hard water. Exclusive Incarnadining Agents and Cosmetic factors achieve unsurpassed cosmetic effects and life-like color. Maximum dilation of vessels ensures extensive penetration of arterial chemical and homogeneous distribution of natural color.

#02994

24 – 16 oz. Bottles



## EPIC DRAINAGE

Unmatched in penetration and solvent power on drugs, the triple-base formulation makes EPIC DRAINAGE equal to the best Arterial fluid as a preservative. When used as directed, the outstanding ability to remove clotted and sludged blood results in unexpected drainage. It is often used as a non-formaldehyde preservative in Jaundice cases which clears BILIRUBIN and avoids BILI-VERDIN discoloration.

#03000

24 – 16 oz. Bottles

## CALSEC

Combines ease of use, Triple-Base Preservatives, and results unmatched by any other product. CALSEC is acknowledged as the best in the industry, even by the competition, and offers the flexibility to be used as a pre-injection, co-injection, or Jaundice chemical. Exclusive ESCO Incarnadining agents and cosmetic factors provide a tracer stain which completely penetrates the tissue and allows a uniform cosmetic life-like appearance. Technicians that routinely use CALSEC report, "Multiple point injections, even in the difficult cases, is dramatically reduced."

#03020

24 – 16 oz. Bottles







# Drainage Chemicals



## SOFNER

The original and still most powerful blood liquefying and mineral sequestering agent in the industry. Sequesters Calcium and other metallic ions which cause clotting. Sofner will eliminate all problems of astringency, distribution, clot formation, streaking, or splotching. Used on arteriosclerotic cases, drainage will be more than expected. Thrombosis and apoplexy cases will embalm as easily as the normal case.

#03023

24 – 16 oz. Bottles

## DRUG & STAIN REMOVER

The fastest solvent of drug discolorations and physiological stain on the market. Combined with Drainage chemical it will remove the severe stains caused by disease of administration of drug therapies. If not completely removed; lightening will be sufficient enough to cause no adverse condition for the application of moderate cosmetics. **It must never be used in any solution containing formaldehyde.** It will dissolve and remove Methylene Blue, as well as discoloration caused by every known drug treatment in heart and kidney diseases.

#20075

Pint







# Arterial Chemicals

The ESCO/GOLDCREST Arterials offer the embalmer the greatest flexibility of any fluid available. The extensive range of Arterials allows the embalmer to get the desired result regardless of condition of the case. All of the fluids are slightly alkaline and have exceptional germ-killing properties, an unparalleled ability to cross-link with protein, low astringency to blood vessels, and the integumentary layers, and an extraordinary diffusion of life-like tissue color. Minimum application of cosmetics, if at all, is the rule when using ESCO/GOLD CREST Arterials.





# Arterial Chemicals

## EPIC Index 30

Similar in formulation to Epic 18 and the Epic 25. Epic 30 achieves more firmness in a faster time with know dehydration. Lanolin Based. The color developed is natural and diffuses to all surfaces. The triple-based formulation guaranties a safeguard equaled by no other arterial.

#03005

24 – 16 oz. Bottles



## EPIC INDEX 18 (Pink/Tan)

Penetration, diffusion, and saturation of “Epic” are extremely efficient. Minimized dehydration is achieved by a chemical balance of lanolin and incorporated materials and ensures pliable joints; excellent skin textures, and prevents the embrittlement of collagen. Cosmetic color is natural with a moderate firmness of tissue. Inclusion of Bacterin and Destrin in the triple-based formulation guarantees a safeguard equaled by no other arterial. By adding a predominating Tan color, “Epic Tan 18” offers a more golden, or out of doors complexion.

#03002–Pink #03006–Tan

24 – 16 oz. Bottles

## EPIC Index 25

Similar in formulation to “Epic 18”, a decided firmness and rigidity is achieved in much less time. The color developed is natural and diffuses to all surfaces. By inactivating enzymes, second day changes in firmness is non-existent and ensures safety of that case which requires prolonged delay to disposition.

#03004

24 – 16 oz. Bottles







# Arterial Chemicals

## MING Index 18

Derived its name from the “Ming Dynasty” of ancient China known for its fine translucent porcelain ware. It is ideal for use on children, women, the aged, and all cases where the skin is particularly delicate. The formulation allows a moderate firmness with no dehydration and a mild cosmetic effect. The preservation, penetration, and saturation is so thorough that many firms have incorporated “Ming” as their standard arterial.

#03014

24 – 16 oz. Bottles



## CIRCOL Index 20

The total balance of the cosmetic factors and incarnadining agents in “Circol” allows this arterial to work with the circulatory system as no other product. A complete saturation and control of color to all surfaces is perfectly attained in every case. Triple-base formulation ensures complete preservation with no browning/graying, burning or contortion of facial features. “Circol” has been called, “The nearest to a perfect fluid that can be chemically synthesized.”

#03022

24 – 16 oz. Bottles

## CIRCART Index 17

An Arterial designed for the embalmer who prefers the higher rate of flow, but complete control of color and skin texture. Cosmetic factors and incarnadining agents are similar to “Circol”, but includes an anti-dehydrant ensuring adequate supply of moisture to the tissue. Harsh skin, browning/graying, burning, or other undesirable effects are eliminated with the triple-base arterial.

#03026

24 – 16 oz. Bottles







# Arterial Chemicals



## LITHOL, LITHOL C/R Index 32

A specialized arterial fluid for the extreme embalming case. Formulated for autopsied, electrocuted, frozen, or any case which is difficult to firm, "Lithol" is the essential fluid for every embalming room. It has fast, complete saturation and penetration of the tissue and is compatible with any other fluid. "Lithol C/R" imparts a more vivid color and is preferred by the embalmer, which desires cosmetic effect from arterial injection, rather than external application. This arterial fluid produces a desired firmness result and is guaranteed to yield a case free of post-embalming concerns. As with all difficult cases ESCO recommends a pre-injection of Drainage Chemical and "Sofner" for systemic clearance of stain and discoloration. Followed by treatment with one of the "Lithol" fluids.

#03040-Lithol #03041-Lithol C/R24 - 16 oz. Bottles

## L.E.A.F. & Index 20 & 25

L.E.A.F. is a lanolin arterial that is so chemically balanced that it ensures soft, natural skin texture, pliable joints and no dehydration – even if used over-strength. Color is slight by adding ESCO incarnadining agents. Addition of ESCO fluid color will intensify the hue to suit the case.

#03044

24 - 16 oz. Bottles



## L.E.A.F. PLUS Index 20 & 25

L.E.A.F. PLUS produces like results as its older brother, but in much less time. By increasing the index of the basic L.E.A.F. the embalmer is able to obtain the desired pliable joints, soft skin textures, and life-like hues, in about half the time required for most lanolin arterials.

#03045

24 - 16 oz. Bottles





# Arterial Chemicals

## C.L.A.F. Index 22

An arterial, which offers the embalmer a lanolin/formaldehyde, based fluid with exceptional qualities, including a mild pink color, flexibility of joints, and soft skin textures. For the embalmer that wants a standard lanolin fluid C.L.A.F. is the overwhelming choice. The penetration obtained is incomparable.

#03046

24 – 16 oz. Bottles



## INSTANT Index 35

The extreme firming arterial fluid of the ESCO family of fluids. Utilized on the problem case, i.e.; autopsied, frozen, electrocuted, or decomposed case, "Instant" produces immediate results in saturation, penetration and firming of the tissue. It produces excellent results in cases with a swarthy, or darker complexion. It is the preferred fluid for difficult cases in the African-American community. Used as a "booster" with other arterials, "Instant" ensures a rapid firming of the tissues.

#03089

24 – 16 oz. Bottles

## ESCO SPECIAL (Pink/Tan) Index 23

A less sophisticated arterial, double-based with formaldehyde and another preservative to assure excellent results. The pink formula is suited for the normal case, while the tan is preferred for the outdoors or darker type complexions. By adding "Egyptian Balsam" principles to the "Esco Special" fluids, cosmetic and preservative effects are superior to any double-based fluid available. Favored by many embalmers who prefer a middle-of-the-road, medium priced fluid, the "Esco Specials" have perfectly filled the niche.

#03070-Pink #03072-Tan

24 – 16 oz. Bottles







# Arterial Chemicals

## POWER PLAY Index 28

An arterial which has had great success in the Canadian Provinces for many years. Introduced to the lower 48 only a few years ago. "Power Play" has found a permanent home in many large volume firms. It is a very stable, higher indexed, economically priced fluid, that meets the needs in almost any situation. Outstanding penetration and diffusion is characteristic. Ammonia and toxics cannot weaken "Power Play."

#03060

24 – 16 oz. Bottles



## COMPO HARD Index 28

Designed to produce an extremely rigid firmness with maximum preservation in even the most difficult case. Edematous, gangrenous or cancerous tissue will attain complete saturation. Cosmetic effect is achieved by adding color to the desired degree.

#03054

24 – 16 oz. Bottles

## FREEFORM

Freeform is an environmentally safe non-formaldehyde, non-volatile, practitioner friendly capillary wash developed to temporarily control post mortem changes. The flushing controls the rate of natural degrading of the body. Freeform clears discolorations and neutralizes the residuals of medications allowing time for limited visitations in a natural state. Freeform is temporarily bacteriostatic to microbial decomposers associated with Green burials and the natural decomposition process. The body will then recycle naturally.

#03011

24 – 16 oz. Bottles







# CavityChemicals

The ESCO line of cavity chemicals is unsurpassed, unmatched and unparalleled by any other company. It is the widest selection of chemicals, from one source, in the industry. The broad array of cavity chemicals will ensure selection of an effective product to meet any specification the embalmer may encounter. Thorough aspiration and application of the ESCO cavity chemicals confirms post-embalming problems to non-existent.





# Cavity Chemicals

## POLAR Index 18/FIRMIDEX 53

A cavity chemical so potent and penetrating, an entirely new concept in grading had to be developed. Equivalent to a formaldehyde index of 53, "Polar" has remarkable penetration and immediate fixation properties. An exceptional quality is its low fume, pleasant aroma which allows the embalmer an unexpected agreeable ambient environment in the prep room. Undeniably, the finest cavity chemical ever produced, it is the cavity chemical of choice in the high case volume prep rooms across the nation.

#02998

24 – 16 oz. Bottles



## EPIC CAVITY Index 26

"Epic" is absorbed and combines with tissue so rapidly and completely, that no cavity fluid can be recovered with reaspiration 8 hours following the initial operation. It will produce the driest and most complete saturation of any cavity chemical available. Undiluted "Epic Cavity" will ensure against enzymatic change, fermentation, purge or tissue gas. It is an excellent topical bleaching pack for mild discolorations and a preserving bleach when hypodermically injected. The odor is similar to traditional cavity fluids, however penetration is unmatched by any other. For the technician from the old school who feels that cavity fluid must sting the eyes and burn the nasal passages, "Epic Cavity" is your product.

#03008

24 – 16 oz. Bottles

## CAVREX Index 28

Compatible with the "C" line arterials it ensures complete cavity preservation by osmotic and penetrative properties that nullify the bacteria responsible for putrefactive problems. Second and third day concerns of tissue gas, purging, odors, etc. are eliminated when "Cavrex" is the fluid of choice. A mild odor makes it popular among many firms and especially prevalent in high volume case prep rooms. It lends itself well to bleaching qualities used either as a topical pack or hypodermically injected.

#03030

24 – 16 oz. Bottles







# Cavity Chemicals

## POWER PLAY Index 28

Introduced to the lower 48 from the ESCO Canadian operations, "Power Play Cavity" is an economically priced fluid with outstanding preservative qualities. Viscera and contents are totally fixated and firmed with minimum treatment. The osmotic penetration is unparalleled to any other cavity fluid in its price range. Suited for the firm that is influenced by cost, but equally concerned about quality, "Power Play" is the answer.

#03062

24 – 16 oz. Bottles



## COMPO CAVITY INDEX 26

The economical cavity chemical with optimum penetrating power. It works well when hypodermically injected to tissue devoid of circulation and attains moderate bleaching effect when used as a pack. A single based fluid, "Compo Cavity" is the fluid of choice for the technician looking for the thrifty, worry-free chemical.

#03058

24 – 16 oz. Bottles

## COMPO NON-IRRITANT Index 4

An extremely low content formaldehyde cavity fluid which is non-irritating to the nose and throat membranes of the embalmer, yet preeminent in its preservative power. Caution, should be used however, to insure that contact with living skin is avoided. Latex, or Nitrile gloves should always be worn when "Compo N/I" is used. It is a most effective cavity chemical, economically priced for the formaldehyde sensitive technician.

#03056

24







# Special Usage Chemicals

The chemicals on the following pages have been specially designed and formulated for the professional embalmer to deal with those special and difficult cases in situations that we do not see on a regular basis. These chemicals, some of which are very new, and some that have been with us for a long time are now the standard for the discerning professional. You will find these chemicals suitable to handle whatever you may encounter in the preparation room. These chemicals are designed to handle any case that you may come in contact with not only on a daily basis, but also in the abnormal situations. Cases such as edema can be embalmed with more ease and peace of mind for above average results.





# Special Usage Chemicals

## EPIC CONDITIONER

Triple-base Humectant, Plasticizer, Anti-Dehydrant for use with arterial or cavity injection for controlling formaldehyde dehydration. The most efficient chemical yet compounded to reinforce the tissue to counteract dehydration, burning, browning, parted lips and eyes, or other undesirable tissue reaction to formaldehyde. A sufficient amount of preservative chemical contained in "Epic Conditioner," enhances the ability of arterial fluid to diffuse and permeate the deepest tissue. The qualities of "Epic Conditioner" are so well established that even some of the competition recommends it.

#03010

24 – 16 oz. Bottles



## CELTROL

An Anti-Dehydrant and preservative compounded specifically for the ESCO "C" line fluids. A true colloid so finely milled and containing millions of moisture cells to diffuse to the smallest of capillaries, it assures maximum preservation without the dehydration normally associated with formaldehyde. The ability to support and carry the arterial injection to the minutest part of the vascular system assures homogeneous distribution of cosmetic color and preservatives, while stabilizing the moisture content of the tissue. Triple-based preservatives added to "Celtrol" augments the arterial of choice to penetrate and firm tissue beyond normal expectation.

#03032

24 – 16 oz. Bottles





# Chemical Sundries

Realizing that it is the little things which make the difference, Esco has throughout its existence, devoted much of its time and energies to surveying the needs and then producing an outstanding line of Chemical Sundries. These range across the entire requirements of the profession. From external preservatives and deodorants to restorative materials and cosmetics. In all cases, they have stood the test of time and continue to produce the results which clearly indicate to the practitioner's clients that he is a caring operator.

In all cases, these materials are fine examples of the state of the art and in many instances are exclusive developments for solving needs or problems. They provide the finishing touch which is so important in creating a pleasing Memory Picture. We bespeak your attention to the application of Esco Chemical Sundries.





# Chemical Sundries

## ARON ALPHA

A rapid bonding cyanoacrylate adhesive used for incision sealing, eye closure, lip positioning, tissue grafting and bone positioning for minor and major restoration.

#30913

1 Kit = 5 Tubes



## BRUISE BLEACH

ESCO Bruise Bleach is formulated specifically for bleaching anti-mortem discolorations reducing localized areas of swelling. It may be applied hypodermically or by surface pack.

#20037

16 oz. Bottles

## CADISOL

A specialized tissue cauterant formulated to dry, bleach, disinfect and preserve denuded areas (abrasions, skin grafts, anti-mortem and post-mortem discolorations). It may be applied hypodermically or by surface pack.

#20035

16 oz. Bottles



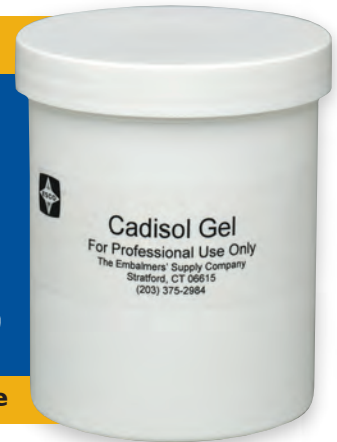




# Chemical Sundries

## CADISOL GEL

A specialized viscus tissue cauterant formulated for use on skin slip, denuded areas, donor bodies where venous circulation has been disrupted. It may be applied topically with a brush swab or internal/external packs.



# 20030 2 lb Jar

#20036 Tube



## LYSOL® BRAND I.C.™ QUATERNARY DISINFECTANT CLEANER

- Hospital disinfectant cleans and disinfects hard, nonporous surfaces
- Economical, concentrated formula makes up to 256 gallons (1:256)
- Virucidal, fungicidal and bactericidal
- Multi-purpose, neutral pH, germicidal detergent and deodorant

Use on all non-porous surfaces.

Recommended for cleaning and decontamination against HIV-1 (Aids Virus) on surfaces/objects soiled with blood/body fluids. HIV-1 (Aids Virus) is inactivated after a contact time of 4 minutes at 25°C (room temperature). Use a 10 minute contact time for other viruses, fungi and bacteria.

#28012

1 gallon

## DEPO (Dessicating Powder)

A searing and dessicating powder for use internally and externally which creates an impervious crust. Dries leaking surfaces created by radiation exposure, fire, organic or microbial disease lesions, traumatized tissue and Donor bodies.



#20048

12 oz. Canister





# Chemical Sundries

## DRY SHAMPOO

Developed to clean dirt, hair dye, cosmetics and tobacco stains from hair, mustaches, eyebrows, hair and fingers. Apply with cotton or small spray bottle for maximum cleaning effects and control.

#20081

16 oz. Bottles



## EDEMA PRO

A revolutionary formulation developed to be selective in its action in eliminating edematous conditions within specific areas of the body. Used as a co-injection chemical.

#03025

24 – 16 oz. Bottles

## EMC (Cream)

An external moisturizing water soluble cream which may be applied before, during or after embalming to retain natural skin texture. A unique system for depth moisturization within the deeper layers of the skin, to create natural tissue consistency and base cosmetic effect. Available in 8 ounce tubes which prevents evaporation and deterioration to maintain stability.

Available in White, Peach, Tan, Pink and Flesh.

#24900

8 oz. Tube







# Chemical Sundries

## EMOLLIENT CREAM

A superficial shineless cleansing massage cream developed to create a light tint base for cosmetic powders.

Available in White, Tan, Brunette, Blonde and Pink.

#23516 1 lb. Jar

#23512 gallon



## FLEX

An antidehydrant skin vitalizer which creates a velvety appearance when applied to exposed areas of the embalmed body. Counteractive softening emollient to astringent formaldehyde reactions, creating a natural skin consistency.

#20085-Neutral

#20086-Tinted

16 oz. Bottles

## FOR-JEY Formalin Jelly

A water soluble formaldehyde based jelly developed to be used as an external pack for post-embalming preparation where secondary treatment is required. Efficient, easy to apply and remove from skin surface with water.

#20068

8 oz. Jar







# Chemical Sundries

## HARDENING COMPOUND BTU

Filler and preservative powder BTU. Used in secondary treatment of viscera, internal packs cavitated areas due to cysts and neoplasms and as a cavity filler after autopsy. Used as a bulk and compacted filler to reinforce preservation and restore natural body contours. BTU special composition antibiological, absorbent filler with a 15:1 absorbent capacity, especially developed for the autopsied body where cremation is the preferred choice for final disposition. Retort and environmentally friendly compound.

**#20975 5 gal. Pail #29715 15 gal. Drum #29730 30 gal. Drum**



## HARDENING COMPOUND Pulverized

Filler and preservative powder used in secondary treatment of viscera, internal packs cavitated areas due to cysts and neoplasms and as a cavity filler after autopsy. Used as a bulk and compacted filler to reinforce preservation and restore natural body contours.

**#20825 25 lb. Pail #20850 50 lb. Drum #28100 100 lb. Drum**

## QUAD

A hardening and preserving formulated powder with four active ingredients with exceptional drying qualities. Used for internal and external surface preservation.

**#20079 1 lb. Bag  
#27920 20 lb. Pail #27950 50 lb. Drum #27910 100 lb. Drum**







# Chemical Sundries

## POSITIVE POWDER

A Heavy-Fume Embalming Powder. A highly preservative and economical powder chosen for inclusion in the Esco Disaster Kit because of its powder-packed punch. A highly popular item in many areas of the country.

#20072 1 lb. Canister    #27205 5 lb. Drum    #27215 20 lb. Drum  
#27250 50 lb. Drum



## HYGIENIC SOAP

This soap lathers freely and has a rapid cleansing action. It contains emollients that soothe and invigorate, therefore, it cannot irritate the most tender skin. For shampooing it has no superior.

#20018 8oz. Bottles    #20182 1 gal. Jug

## LIP WAX

A combination of translucent and opaque cosmetics and wax which may be blended to obliterate fever sores, cracks, cuts and discolorations. Easily molded and will not peel, harden or crumble.

Available in Clear, Bright Red, Flesh.

#24400

2 oz. Jar







# Chemical Sundries

## IT

A non-staining, non-discoloring orifice deodorizer, preservative and cleaning liquid which is pleasantly scented.

#20063

16 oz. Bottles



## LEAKPROOF SKIN

A topical sealing agent for sealing treated areas where leakage may occur due to the embalming methodology, organic or microbial conditions, radiant, or mechanical lesions. Clear in color and dries rapidly—providing an excellent powder base.

#20551 8 oz. Can

#20554 12 oz. Spray Can



## M-F (MULTI-PURPOSE FILLER)

Antimicrobial shaping and antidehydrating sealing compound. Provides a flexible base filler for restorative treatments. Allows for feature modeling in creating naturalness. Seals embalming and surgical incisions preventing leakage and dehydration.

#20510 1 lb. Jar

#20500 8 oz. Tube







# Chemical Sundries

## NU-IT

A specially formulated non-irritating, nonflammable, nondehydrating spray formulated to kill the AIDS/HIV virus with the protection of the embalmer paramount.



#26301 16 oz. Bottles #26306 6 Pack #26302 12 Pack #26300 1 gal.



## STONE OIL

A heavy, tacky, multipurpose, anti-dehydrating, oil-based, highly viscous material for use in closing the lips and eyes. Also used in dry climate areas to protect tissue. Can be applied to the emaciated case to prevent shrinkage and browning of the tissue due to post-embalming dehydration of the skin.

#20015

1 lb. Jar

## RESTORATIVE WAX

Specialized wax in variable consistencies for specific applications as a deep filler, feature modeling base and resurfacing epidermis.

Available in Flesh, Bisque, Ebony, Neutral and Suntan.



#22900

6 oz. Tins





# Chemical Sundries

## SAN VEINO LIQUID

Use as a pack for bleaching, on exhumation cases, floaters, gangrenous, cancerous and other putrefactive cases to sear, dry and firm the tissues. Use as a preservative on still-born babies. Use hypodermically and for stopping Tissue Gas.

#10171

16 oz. Bottles



## SAN VEINO GEL

The same unequalled chemical preservative and deodorant but in convenient gel form. No more need for messy liquid packs, San Veino Gel is easy to apply, clean and convenient to use. Get all four forms of San Veino and be ready for any case.

#10172

10 oz. Bottles

## SAN VEINO POWDER

San Veino in a slower evaporating form for shipments. Again, the same indispensable ingredients, but a third form that gives even greater convenience. Dust into casket, pouch.

#10173

1 qt. Canister







# Chemical Sundries

## SAN VEINO SPRAY

An essential for all first calls and removals. For spraying the nostrils and mouth, a powerful but effective spray to attack vermin. Also effective against skin slip, can be sprayed on gangrenous areas. Ideal for spraying the oral cavity of those cases suspected of the tubercular bacterium.

#10174

7 oz. Canister



## SEALIT

A powdered incision or filler sealer that gelatinizes instantly on contact with moisture to prevent seepage and leakage.

#20064 1 pint Bottle #26410 1 gal. Bulk

## SOFT-SKIN

A newly developed lanolin penetrating spray which is used prior to, during and after the embalming process. Easy to apply as a deep clear penetrating natural skin vitalizer. Provides a supple base for cream or liquid cosmetics.

#20088

16 oz. Bottle







## 12 oz. Aerosol Can

[illegible]

16 oz. Bottle





# Chemical Sundries

## LIP PASTE

Esco Lip Paste can be applied as easily as a cream. It is opaque and the thinnest application covers perfectly without the slightest artificial effect. The colors available are designed to meet any requirements. Esco Lip Paste will not dry out in the jar. Colors: Light, Brick, Dark



#24101– Light

#24103– Dark

1/4 oz. Jar



## FLUID COLOR (Tan)

In most cases, cosmetic effect is created through the chemical action of fluids. However, in cases such as anemia, where the hemoglobin content of the blood is partially or wholly destroyed, and the incarnadining Agents in Esco Fluids have nothing upon which to act, Esco Fluid Color can be used with excellent results in added mixture with the main arterial.

#22501 – Pint

#22503 – Case of 24 – 16 oz.

## FLUID COLOR (Pink)

In most cases, cosmetic effect is created through the chemical action of fluids. However, in cases such as anemia, where the hemoglobin content of the blood is partially or wholly destroyed, and the incarnadining Agents in Esco Fluids have nothing upon which to act, Esco Fluid Color can be used with excellent results in added mixture with the main arterial.

#22500 – Pint

#22502 – Case of 24 – 16 oz.







# Chemical Sundries

## 3M ADHESIVE

An aerosol product which sticks virtually anything to anything. Sprayed on a dry surface it instantly develops tackiness to which sheeting, cotton or cloth adhere with amazing firmness. If a few minutes between coats are given, 3M Adhesive may also be used as a sealer on incisions or on head posts. In such use, several coats of 3M Adhesive will be required to bridge any gaps which may exist on the surface sprayed.

#40091

16 oz. Can



## SPRAYER

Special Sprayer for Special Purposes. A Portable cosmetic tool. Can be used to spray most liquid cosmetics, such as Facial Tint, Liquid Powder, or Liquid Mask. Cleans up with Thinner and Solvent, so that the sprayer can be used again with a different cosmetic. Will not spray powders. 6 ounce glass jar, 3 oz. air cylinder. More than enough spraying power to do many different jobs.

#40950

## LIQUID POWDER

Far superior to old style dry powders. It can be blended and applied much more easily and has far better adhesive qualities. From the 5 tints, any tint desired may be blended. The result is a velvety softness to the skin with perfectly feathered out tints that enhance every case. Colors: Flesh, Light, Rachel, Brunette, Burnished Straw.

#26000

4 oz. Jar, Pint





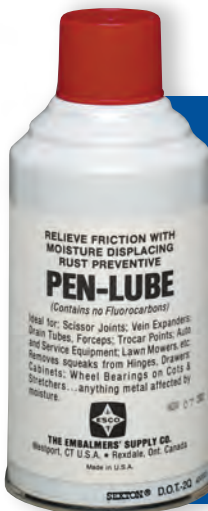


# Chemical Sundries

## TISSUE FILLER – WATER SOLUBLE TYPE

Esco Tissue Filler in the water soluble type, which is injected and molded into the required shapes. Water clean up, no solvent needed.

#20016 – 16 oz. Bottle   #21632 – 32 oz. Jar   #21612 – 1 gal. Jug



## PEN-LUBE

Pen-Lub is the best penetrating and light lubricant that a Funeral Home could have for the odd job of freeing up scissor joints, lubricating trocar shafts, freeing wheels on cots, etc. Pen-Lub will penetrate where other similar products won't. Packaged in a 12 oz. aerosol can it will free any item that needs lubrication around the Funeral Home. Works immediately.

#20073

12 oz. Aerosol Can

## FACIAL TINT

These tints may be applied with brush, spray or cotton. If too much is applied, or a change is desired, they can be removed easily with soap and water or alcohol. They are a practical cosmetic proven in the field. Colors: Pink, Flesh, Suntan, Peach.

#21301 8 oz. Bottle, Pint, Quart







# Chemical Sundries

## AMAZING SPRAY CLEANER

A highly effective SAFE spray-on detergent. It is biodegradable and contains no phosphates. NOTE: It should NOT be used on acrylic (latex) paints (you could remove the paint with the dirt). Great for tile, stainless and porcelain tables, all brands of oil painted walls and surfaces, linoleum, machinery and glass. It cleans with one swipe of a cloth 60 seconds after application. Excellent for homes, Funeral Homes, and Hospitals. Comes complete with sprayer.

#2100

32 oz. Spray Bottle



## DISINFECTANT SOAP

Anti-bacterial, anti-microbial, all-purpose soap. For cleaning and massaging, its hygienic and non-drying to skin. For prep room surfaces it can't be beat! Clean and disinfect with the unparalleled power of iodine! Designed with the conscientious person in mind!

#25510

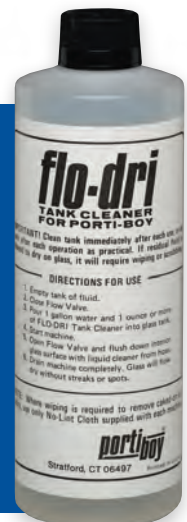
1 gal. Jug

## FLO-DRI

This product of modern day chemistry, when used as directed on the label, will clean the tank or fluid reservoir of any Porti-Boy Embalming Machine without causing streaks or spots. A valuable time-saver, Flo-Dri will keep the glass tank spotlessly clean between each use. It's a real Prep Room essential.

#41626

Pint







# Chemical Sundries

## F-6 INSECT KILLER

A powerful, pressurized chemical for killing and repelling maggots, lice, fleas, blow-flies, etc., that are found on certain cases, or that can congregate and reproduce in waste-containers around the Home. Maggots will not develop on surfaces or in areas sprayed with F-6 Insect Killer.

#40070

16 oz. Can







## GoldCrest Embalming Chemicals

**A**t the time of my entrance in Funeral Service, late in the decade of the 1940s, I remember The Gold Crest Chemical Company of Mendenhall, Pennsylvania. At that time everyone was using these revolutionary new products called the HEXAPHENES, both the MA-22 and the MA-37, MA-88 Arterial Fluid, and MA-64 Cavity Fluid. In the catalogue that I had in 1979, the company was then into its fourth decade of existence.

Due to a devastating fire which occurred at their facilities in the winter of 1989, in which the building and all of its contents were completely destroyed, Mr. Paul Ryas, the owner of Gold Crest Chemical Company made the decision that he would not rebuild the company, but sell it. During the winter of 1989 following the fire at Gold Crest, Mr Richard Beck Chairman of the Board of Directors of Esco, and Mr. Shawn Beck the current president of Esco, visited Mr Ryas in Pennsylvania and a deal was struck for Esco to purchase Gold Crest. A contract was consummated between Esco and Gold Crest on, May 29, 1989.

From that day forward Esco has continued to supply the discriminating embalmer in the United States, Canada and around the world with the very same high quality products that were produced in Mendenhall, Pennsylvania.

We at Esco are proud to be able to continue to bring to Funeral Service the Gold Crest line of products to our valued customers around the world.





# GoldCrest Embalming Chemicals

## HEXAPHENE MA-37

An Osmotic Embalming Chemical. Hexaphene MA-37 is unmatched for the perfect preservation of viscera and the vital organs. Users say that MA-37 sweeps through viscera with amazing speed leaving the whole mass thoroughly disinfected, consummately preserved, dry and odorless. This is accomplished in a fraction of the time with less than half the work. Onerous surface conditions are quickly and permanently corrected with Hexaphene MA-37. Bed sores, odor sources, the ravages of cancer, mangled or charred bodies—such conditions present no problem whatever with MA-37.

#01822

24 – 16 oz. Bottles



## HEXAPHENE MA-64 CAVITY CHEMICAL

An Osmotic Embalming Formula. Hexaphene MA-64 accomplishes much more than preservation alone. MA-64 thoroughly diffuses the viscera with a powerful Hexaphene chemistry that is both unique and unmatched. If menacing CI Welchii bacteria is present, it is annihilated. Other gas forming or staph culture bacteria is destroyed on contact. As with all the Hexaphenes, MA-64 accomplishes still other highly desirable functions. Swiftly and permanently the whole viscera mass is completely deodorized, sanitized and preserved.

#01820

24 – 16 oz. Bottles

## HEXAPHENE MA-22

Hexaphene MA-22 is Hexaphene Chemistry but in a heavier mass and more viscous form. It is the perfect material for treating certain conditions. A mass of Hexaphene MA-22 placed inside a rubber or plastic stocking is all that is required for treating dropsical or edematous lower limbs. The limb will be thoroughly embalmed and dehydrated. The upper limbs may be treated by an external application of Hexaphene MA-22 covered with thin vinyl or saran wrap. MA-22 will hold the covering material securely intact permitting the body to be dressed over the treated area. There will be no odor or leakage. Traumatic conditions, cancer, gangrene, etc., may be effectively treated by a simple external application of MA-22.

#21834

2 1/2 lb. Jar







# Gold Crest Embalming Chemicals

## HEXAPHENE POWDER

Moist surfaces and autopsy cases—Hexaphene Embalming Powder should be applied. Hexaphene's anti-fungi germicidal chemistry is exactly what is needed to ensure the right chemical environment for shippers and mausoleum cases. Its use inside the casket will positively prevent mildew, mold, etc. There will be no adverse effect upon the body itself. A little Hexaphene Powder placed inside the casket is your best insurance that the body will maintain good appearance and condition.

**#21842 1 lb Can #21844 25 lb Pail #21845 50 lb Drum**



## REX 36 Index 36

Compounded like a prescription, new high-strength REX-36 is King of the Arterials. No other Arterial is compounded like REX-36. No other Arterial performs like REX-36. The advantages of a high index arterial fluid are well know; the problem was adverse side effects. There are no adverse side effects with REX-36, only the positive advantages of a 36 index arterial fluid. REX-36 gives controlled reaction: full drainage, flawless cosmetic results. It's the prescription type adjuvant chemistry that makes REX-36 different. Versatile REX-36 firms frozen and edematous bodies; is dehydration free, even in normal cases.

**#01802 24 – 16 oz. Bottles**

## TEEN 20 Index 20

Experience has shown that Teen 20 Lanolin is unmatched in range and flexibility. This is the unique characteristic of Gold Crest Teens. Teen 20 broadens the range within which the embalmer might demonstrate his technical finesse. If, in the embalmer's judgment, a particular body should be given a much greater than normal preservation level—he can safely do this with Teen 20. The rare flexibility of this arterial will allow the embalmer to double the fluid concentration strength of a solution if his judgment tells him to do that. He will not compromise adversely other desirable factors. There will be no dehydration, no over-embalming, no undesirable appearance modifications.

**#01806 24 – 16 oz. Bottles**







# Gold Crest Embalming Chemicals

## ACT CAVITY

Want a modern top grade dependable fumeless cavity fluid? Want a reliable booster for an arterial solution? Got a bleaching job to be done, arterially or externally? Got an odor problem that's about to run you out of your own preparation room? Got a body orifice that you know needs reliable preventive treatment? Want a more dependable jaundice fluid? Believe us, the best answer to each of these questions is new Gold Crest Act.

#01826

24 – 16 oz. Bottles



## RUBIN-X No.1 JAUNDICE FLUID

Rubin-X Arterial Embalming Fluid is the only jaundice fluid we have found that will consistently bleach jaundice stain successfully. We say that in eight out of ten cases you will completely erase the mark of severe jaundice. The other two will show marked improvement. All will have been thoroughly preserved. None will have evidenced adverse side-effects. Rubin-X will prove invaluable in the treatment of cases evidencing post mortem stain. For use with Rubin-X No.2 (below).

#01814

24 – 16 oz. Bottles

## RUBIN-X No.2 JAUNDICE FLUID

Rubin-X Arterial Embalming Fluid is the only jaundice fluid we have found that will consistently bleach jaundice stain successfully. We say that in eight out of ten cases you will completely erase the mark of severe jaundice. The other two will show marked improvement. All will have been thoroughly preserved. None will have evidenced adverse side-effects. Rubin-X will prove invaluable in the treatment of cases evidencing post mortem stain. For use with Rubin-X No.1 (above).

#01816

24 – 16 oz. Bottles







# Gold Crest Embalming Chemicals

## HEXYETHYLPHENOFORM

The most resistant type of bacteria are destroyed on contact with Hexyethylphenoform. Any case of known contagious disease or one evidencing a plus condition, should be treated with Hexyethylphenoform. Treatment may be by spray, pack, or by hypodermic injection. Three powerful, but harmless gases give this product exceptional deodorizing and preservation power. The odor is neutralized quickly; the source corrected. Hexyethylphenoform is widely used as an autopsy cavity fluid, an external embalming fluid, an external bleacher, for the destruction of body vermin, etc. It is an outstanding multi-purpose fluid.

#01818

24 – 16 oz. Bottles



## COSMETIC FLUID DYE – Flesh

Gold Crest Cosmetic Dye is an internal cosmetic. Added to your arterial solution it permits a much wider range within which you express personal preference in cosmetic effect. It can add finesse to arterial embalming. Superior dyes plus careful compounding give this product the permanence and solubility essential to successful internal cosmetic diffusion.

#22400–Pint

#22402 Gallon

## TINTING SPRAY

The popular acceptance of this very excellent cosmetic continues to increase year after year. For many jobs, a simple spray application of Tinting Spray is exactly right. A prior application of massage or tissue cream to the face will not impair the subtle effect of this cosmetic. Just remove the excess cream—the residual surface oil will present no problem. Tinting Spray is a natural tint which may be applied to the entire face and hands.

#26100 – Flesh #26101 – Suntan #26102 – Dark Red #26103 Dark Suntan







# GoldCrest Embalming Chemicals

## BEX

BEX is an embalming powder of great strength. It is designed to correct adverse conditions in which a powder treatment is indicated. BEX is ideal for treating traumatic conditions producing a moist surface. It will cling to the surface, dry, embalm and deodorize the area. A pound of BEX sprinkled inside the cavity will perform more effectively than would a standard cavity fluid. BEX will not gravitate away as would a liquid. It will remain where placed, dry, embalm, disinfect and deodorize.

#20057 – 1 lb. Can

#27225 – 25 lb. Pail

#27226 – 50 lb. Pail



## RE-VIVA-TONE

With this very popular liquid cosmetic it is possible to quickly revive natural, soft, life-like beauty. The ashen pallor of death is erased. The transformation is accomplished with a delicate transparency that imparts unbelievable naturalness to skintone and over-all effect. With many cases no further cosmetic work is required. Re-Viva-tone is so easy to apply—with either a soft brush or an air brush. It will never streak or pile up. The hair line is not a problem—go right over it.

### Without Powder:

#21110 – Dark  
#21108 – Suntan  
#21107 – Creole  
#21106 – Blush  
#21109 – Light

### With Powder:

#21120 – Dark  
#21118 – Suntan  
#21117 – Creole  
#21116 – Blush  
#21119 – Light

16 oz. Bottles

## MOUTH FIX

Applied behind the lips, this tacky compound can be a real time-saver and produce better results. The surest method for achieving natural expression. Also for preventing lip separation. Try it.

#24115

1 lb Jar







# Gold Crest Embalming Chemicals



## PHANTOM CREAMS

Micro ground Phantom Creams possess astonishing covering power. Yet, because they blend so perfectly, it's no problem at all to effect the most subtle shadings and accents. Shades included in the set are listed from light to dark. Light Flesh (shown at left), Nude, Ivory, Flesh, Pink Flesh, Suntan, Dark Flesh, High Brown, Light Rouge, Masculine Rouge and Dark Rouge.

Nude	Ivory	Flesh	Pink Flesh	Suntan	Dark Flesh	High Brown	Light Rouge	Masculine Rouge	Dark Rouge
#22800 – 2 oz						#22824 – 8 oz			





## Instruments & Prep Room Supplies

**E**sco offers a complete line of the very best prep room supplies on the market. The Slaughter instruments in this section are of the highest quality and are those best adapted to funeral service. The Porti-Boy line of embalming machines offer simplicity and dependability with a long record of trouble-free service.

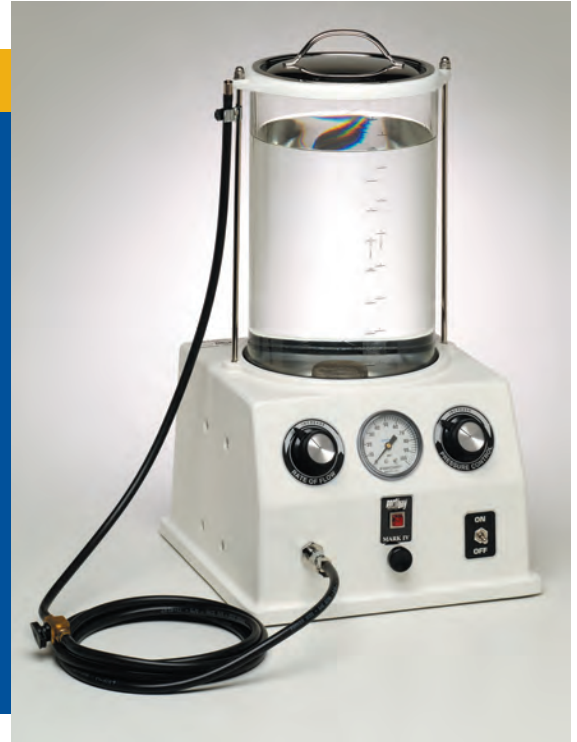




# Embaling Machines

## PORTI-BOY MARK IV

Max. Injection Pressure Range: 45–60 psi  
Cabinet Construction: Aluminum Casting  
Finish: Nylon inside & out  
Color: White  
Fluid Capacity: 2½ gallon glass tank  
Fluid Reservoir Base: Stainless Steel  
Automatic Shut-off: Yes  
Motor: 1/6 hp  
Standard Voltage: 110V/60 hz – 1 phase AC  
Power Cord: 8 ft. polarized, heavy duty  
Pump Drive: Mag Drive  
Pulsation Feature: No  
Height: 22½"  
Depth: 12¾"  
Width: 12¾"



## PORTI-BOY MARK V

Max. Injection Pressure Range: 80–100 psi  
Cabinet Construction: Aluminum Casting  
Finish: Nylon inside & out  
Color: White  
Fluid Capacity: 3¼ gallon glass tank  
Fluid Reservoir Base: Stainless Steel  
Automatic Shut-off: Yes  
Motor: 1/4 hp  
Standard Voltage: 110V/60 hz – 1 phase AC  
Power Cord: 8 ft. polarized, heavy duty  
Pump Drive: Mag Drive  
Pulsation Feature: Yes  
Height: 24½"  
Depth: 15"  
Width: 15"







# Trocars & Points

## TROCAR POINTS



#	Item	Fits
49831	Dynamic Trocar Point (2-Piece)	$\frac{3}{8}$ " diameter dynamic trocar
49836	Dynamic Trocar Point (2-Piece)	$\frac{5}{16}$ " diameter dynamic trocar
49832	6-Pack of Tips for 2-Piece Points	$\frac{3}{8}$ " diameter dynamic trocar
49837	6-Pack of Tips for 2-Piece Points	$\frac{5}{16}$ " diameter dynamic trocar
49800	Slaughter Trocar Point	$\frac{3}{8}$ " diameter Slaughter trocar
49801	Slaughter Trocar Point	$\frac{5}{16}$ " diameter Slaughter trocar
49803	Slaughter Trocar Point	$\frac{3}{16}$ " diameter Slaughter trocar
49804	Hypodermic Handle Valve Trocar Point	$\frac{1}{8}$ " diameter hypo trocar
49805	Hypodermic Handle Valve Trocar Point	$\frac{3}{16}$ " diameter hypo trocar

TROCAR POINTS SHOWN ACTUAL SIZE



## VALVE HANDLE

Slip hub valve handle for Hypo Trocar Shafts. #871

## CHILD'S TROCAR



Working length 8" x  $\frac{5}{32}$ " O.D. Sold without cleaning rod.

#820-16





# Trocars



## SLAUGHTER TROCAR



Available in four working lengths (16, 18, 20, 22"). Each length is available in 3/8" or 5/16" diameters. The 3/8" diameter trocar comes with one pair of holes in the shaft. The 5/16" trocars have three pairs of holes in the shaft. Sold with cleaning rod.

16" x 3/8" Trocar	#816-16	16" x 5/16" Trocar	#817-16
18" x 3/8" Trocar	#816-18	18" x 5/16" Trocar	#817-18
20" x 3/8" Trocar	#816-20	20" x 5/16" Trocar	#817-20
22" x 3/8" Trocar	#816-22	22" x 5/16" Trocar	#817-22

## SLAUGHTER TROCAR



A 3/16" outside diameter trocar available in four working lengths (7, 12, 16, 18"). Because of its extremely fine point, this trocar is often used for infant, autopsy and parietal work. 7 and 12" trocars come with cleaning rod; 16 and 18" trocars do not.

7" Trocar	#819-7
12" Trocar	#819-12
16" Trocar	#819-16
18" Trocar	#819-18

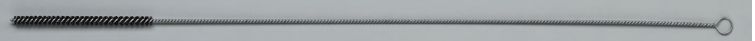
## DYNAMIC TROCAR



16 and 19" working lengths are available in 3/8" and 5/16" outside diameter. Unique two-piece point eliminates the need for an irrigated barrel. Large sight glass permits constant observation of aspirated material. Sold without cleaning rod.

16" x 3/8" Trocar	#829-18	16" x 5/16" Trocar	#834-16
19" x 3/8" Trocar	#829-19	19" x 5/16" Trocar	#835-19

## TROCAR CLEANING BRUSH



24" long, cleans tubes up to 7/16" in diameter. The bristle portion is 1/2" in diameter and 3" long. #35602

## CAVITY CHEMICAL INJECTOR



The use of this injector for cavity fluids, minimizes the fumes when injecting the cavities. It is leakproof under all conditions and fits any standard threaded fluid bottle. 7" #49858  
Stub model also available. (3" smaller injector) #49853





# Aneurism Hooks, Separators & Directors

## ANEURISM NEEDLE

A broad flat handle with thumb groove makes it ideal for use with rubber gloves. Flat blade with thread eye and short curved hook for vein elevating. Chrome plated.



#49854



## ANEURISM NEEDLE

A large eye for heavy suture thread. Curved end for vessel elevating. Chromed brass handle.

#49851

## ANEURISM HOOK

Flat steel handle and large curve.



#30129



## PLASTIC SEPARATOR

A general purpose separator for use in many applications. 6" long.

#49060

## GROOVE DIRECTOR

Stainless steel probe point director. Grooved fascia needle.



#49514





# Aspirators & Accessories

## HYDRO ASPIRATOR

The finest Hydro Aspirator available today. A new improved model. May be easily and completely disassembled for cleaning. Although a 26" vacuum may be maintained at 60 lbs. water pressure a 15" vacuum is adequate for use with a standard trocar. High vacuum will collapse the viscera before evacuation is complete.

#41001



## ASPIRATOR EXTENSION

This extension meets the requirements of some state regulations that call for a 4" gap between the syphonage breaker and the Hydro itself. It also supplies an additional breaker for safety purposes and permits lowering the Hydro into each catch basin to reduce splashing.

#1002



## NON-CLOGGING POST ASPIRATOR

A uniquely designed aspirator for completely draining the cavities. The design provides a large head surface that is multi-vented. It is invaluable where large quantities of liquid and body fluids have to be removed. The head may be detached for cleaning.



#49856

## REGULAR POST-MORTEM ASPIRATOR

Gets in hard to reach areas. Aspirates thoroughly.



#49857

## NASAL TUBE

Essential for purging cases. Evacuates liquid from nasal cavities and the throat. Large nasal tube (pictured), small nasal tube available.

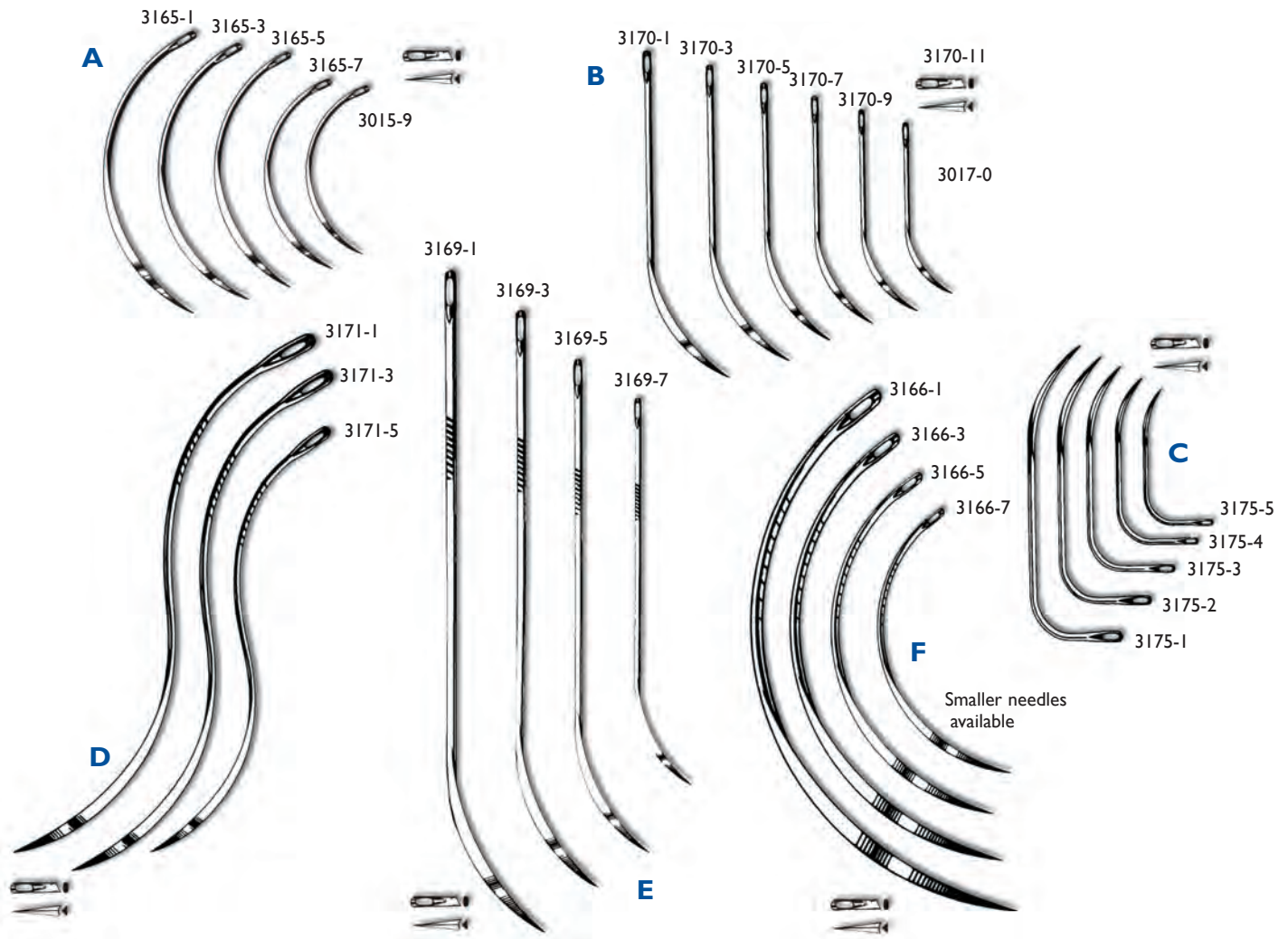


#408





# Suture & Postmortem Needles



## SUTURE NEEDLES

**A.**  $\frac{3}{8}$ " Circle Curved – Patent Eye available in Style A only.

**B.** Half Curved

**C.** Back Curved

**D**

**E**

**F**

**C**

Smaller needles  
available

## POSTMORTEM NEEDLES

**D.** Double Curved

**E.** Half Curved

**F.** Circle Curved

Sold in packages of 6 (one size)





Ys

### Y WITH SLIP HUBS

Chrome-plated.

#607



### Y WITH SLIP HUBS/THREAD MOUNT

Chrome-plated.

#6085

### Y WITH THREADED MOUNTS & HUB

Chrome-plated.

#608HT



### SLIP HUB Y W/THREADED MOUNTS ONLY

Chrome-plated.

#608ST

### Y FITTING WITH STOPCOCKS

Chrome-plated. 3 1/2" long.

#49609







# Stopcocks

## THREADED Y FITTING W/ STOPCOCKS

Chrome-plated. 3 1/2" long.

#609



## STOPCOCK

Chrome on solid brass. Standard internal threads

#70

## STOPCOCK

Chrome on solid brass. Standard internal thread and slip-hub line apertures.

#9070S



## STOPCOCK W/ LUER LOC

Chrome-plated.

#49071

## STOPCOCK

Fits small bore tubing used with PE-10s

#927610D







# Adapters

## ADAPTER

Converts female threaded stopcock to Luer-lock fitting.

#49702



## ADAPTER

Female threaded adapter converts male threaded arterial tubes to slip-hub.

#30307



## ADAPTER

Converts female threaded stopcock to slip-hub.

#49701



## ADAPTER

Converts male threaded stopcock to Luer-lok.

#904-TL





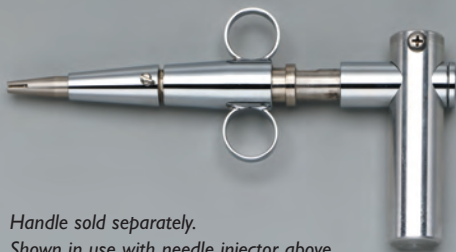


# Needle Injectors/Trocar Buttons

## DODGE NEEDLE INJECTOR

One of the classic embalming instruments. Stands up to years of use.

#40448



Handle sold separately.  
Shown in use with needle injector above.

## NEEDLE INJECTOR HANDLE

Makes life easier for people with small hands.

#4200-A

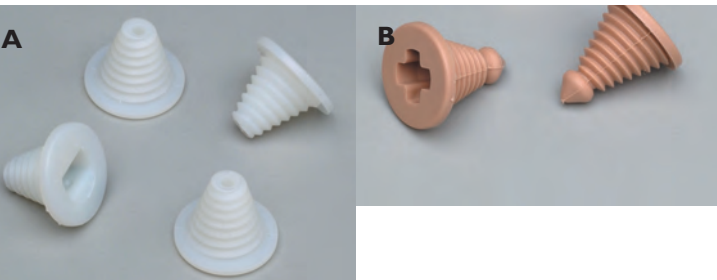
## INJECTOR NEEDLES

A. Injector Needles, Stainless steel wire, one gross.

#42001

B. Injector Needles, brass wire, one gross.

#42002



## TROCAR BUTTONS

A. Standard Trocar Buttons, one gross. #40019

B. Snip-Tip Trocar Buttons, one gross. #30022

## TROCAR BUTTON APPLICATOR

Works with Snip-Tip and standard buttons.



#48409





# Prep Room Accessories

## SUCTION CUP TUBING HOLDER

Holds securely to table top or any smooth surface. Will not mar surface. Handy clamp for various sizes of tubing.

#40177



## MAGNETIC BASE TUBING HOLDER

For those who prefer to have a metal base holder on a steel table top, we offer the Hopkins tubing holder.

#40176



## 3-GALLON PAIL

Large 3-gallon capacity heavy duty bucket, 16 gauge Stainless Steel, smooth inside construction for easy cleaning. A superior quality item designed to give years and years of service. Sturdy carrying handle.

#32000



## PAIL LINER

Visceral Bags used to preserve the viscera of autopsied bodies. These heavy-weight polyethylene bags together with Nu-Leco offer the easiest, least troublesome method of preparing the viscera from autopsied cases. They have indefinite shelf life, are impervious to chemicals and are practically indestructible.

#30921 – one dozen    #30920 – one gross







# Prep Room Accessories



## VERTILIZER

This unique design allows complete sterilization of the Trocar by standing in solution. No need to disassemble any parts. Length is a standard 22" to accept all Trocars. Special orders can be had for parietal Trocars. The unit is made of a fiberglass base and a stainless steel standpipe and will not be harmed in any way by any solution on the market today. Note the ease of standing the unit where it is needed!

#40179

## TISSUE DRYER SET

Set comes complete with three tissue drying attachments: one broad spatula point and two shaped points. Electrically heated with long cord and standard plug. An unbeatable aid for a specific job.

#44015







# Eye Caps, Mouth Plates, Skull Clamps

## OVAL EYE CAPS

The classic shape. 24 per box.

Flesh Large #30634

Clear Large #30636

Clear Medium #42119



## INSIGHT EYE REPLACER

A pair of spheres for a total of six. Will handle anything from corneal excisions to full enucleations and from infants to adults. #

#42500

## NATURAL EXPRESSION MOUTH FORMER

Pre-conformed flexible clear Vinyl with sharp, self-impaling spurs readily trimmed to size and perforated for free air movement. Impervious to chemicals. 1 dozen per box.

#40103



## DENTURE REPLACERS & MOUTH FORMERS

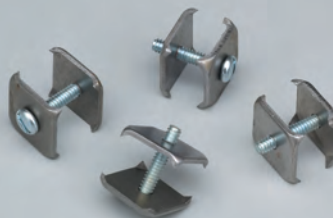
A revolutionary, quick, easy and highly satisfactory way to replace the dentures in a body and repose the features in a relaxed position. When used on subjects with shrunken lips, the tight, drawn, unnatural appearance is readily prevented. Made of a soft rubber-like plastic material, they can be readily trimmed to fit any mouth. The bite can be trimmed or clipped away such as in cases where part of the original teeth have been in use and others missing.

#41011

## CALVARIUM CLAMP

Resetting the cap in cranial autopsy is a job that must be done right the first time. Once placed, it must never shift or move. 20 clamps per box.

#49000







# Positioning Devices

## THE SANIBLOCK

Made of Teflon-like stain-resistant material. White color lends an air of professionalism. Center hole holds tubing for washing down the table. Keeps injection tubing in place, too.

#40524



## EXTREMITIES POSITIONER

Assures hands will stay in place even on very obese cases. Made of 1" wide Velcro.™

#40090

## ARM & HAND POSITIONER

Supports both upper arm and forearm. May be used after dressing to maintain position while casketing the body. Adjustable. With 1" nylon strap.

#40201







# Disaster Pouches

## WHITE DISPOSABLE DISASTER POUCHES

An inexpensive disposable burial pouch made of heavy-gauge (4 mil) opaque white Perma-Safe plastic. Electronically sealed seams. Soft, pliable, economical. C-shaped zipper closure design simplifies body insertion.

Adult size 36" x 86" #

Child size 27" x 42" #

#30654



## BLACK HEAVY DUTY DISASTER POUCHES

Made of heavy gauge (20 mil) black vinyl. C-shaped zipper for fast, easy insertion and removal of remains. Fitted with six sturdy handles.

35 1/2" x 88 1/2" #

#30653

## GREEN 8-HANDLE HEAVY DUTY POUCH

This heavy gauge vinyl pouch is capable of carrying a 300 pound body. It is the so-called envelope, or 3 sided zipper style. Has the weight bearing support welded inside the pouch. Handles are integral within the pouch itself and grips are comfortable to the hand. Furnished in a dull moss green color.

#30658







# Sheets

## SELF-ADHESIVE ELASTIC BANDAGE

Waterproof, leakproof. Sticks only to itself. Excellent pressure bandage for dropsical, swollen case. 3" wide by 5½ yards long when stretched). #

#34021



## LATEX BANDAGE

Adheres only to itself. Elastic and stretchable. Holds wet-packs in place. Suppresses swellings. Adjusts for greater or lesser pressure. 3" in width by 5 yards. #

#40404



## COTTON

Absorbent cotton, long fiber, non-sterile. One lb.

#30622



## PREP TOWELS

Lint free towels 15" long pads, 50 towels per roll. Cosmetic application, bandages, packing, etc.

1 Roll #31622

Case of 8 rolls #31623

Rack available #31624







# Sheets

## SUPER SHEET

Cellulose sheeting backed with polyethylene. Highly absorbent yet waterproof on back. Size: 40" x 90"

#30610 – one dozen    #30609 – Box of 50



## DISPOSABLE SHEETS & APRONS

Disposable Sheets – 40" x 90"; with waterproof polyethylene backing. #30608

Disposable Aprons – 25" x 40"; waterproof on one side and absorbent on other. #40607





# Threads & Accessories

## 4-CORD COTTON – 1/4 LB. SPOOL

A high quality braided cotton thread. Ideal for routine ligating.

#30628



## 4-CORD COTTON – 1 LB. SPOOL

A high quality braided cotton thread. Ideal for routine ligating.

#39133



## BLACK BRAIDED COTTON – 1 LB. SPOOL

Strong, yet soft and pliable. Ideal for all common suturing and ligating operations.

#39140



## 6-CORD TWISTED COTTON – 1 LB. SPOOL

The finest grade of polished twisted cotton thread. Natural color. Stretch resistant, strong, lays smooth.

#39136



## 7-CORD COTTON–1 LB. SPOOL

Heavy post-mortem white. A high quality braided cotton thread. Ideal for routine ligating.

#39137







# Threads & Accessories

## 8-CORD COTTON THREAD –1 LB. SPOOL

A high quality braided cotton thread. Ideal for routine ligating.

#39138



## WAXED LINEN THREAD–1 LB. SPOOL

High quality, strong waxed linen suture thread. Recommended for all-purpose post-mortem stitching.

#39139



## DENTAL FLOSS

For fine stitching – 50 yard spool

#30624



## THREAD PASSER

A quick and efficient method of passing thread under the vessels for ligating. Simply pass threader under vessel, grasp loose end of thread, withdraw thread to desired length, and cut with built-in shearing blade. Spools fit instrument.

Thread Passer #49555

Thread #49558

Snare for Thread Passer #49559

Extra blade, 6 to a package. #49556







# Hypodermic Needles & Syringes

## HYPODERMIC NEEDLES

Hypodermic Needles, all stainless steel slip-on style.

A. $\frac{5}{8}$ " x 23 ga.	#33171
B. 1" x 20 ga.	#33173
C. 1 $\frac{1}{2}$ " x 19 ga.	#33175
D. 2" x 19 ga.	#33177
E. 2" x 18 ga.	#33179
F. 3" x 17 ga.	#33181
G. 3" x 16 ga.	#33183
H. 3" x 15 ga.	#33185
I. 3" x 14 ga.	#33187



## DISPOSABLE PLASTIC SYRINGE

10 CC Disposable Syringe	#43160
20 CC Disposable Syringe	#43161
30 CC Disposable Syringe	#43162

## GLASS SYRINGE

10 CC Glass Syringe	#33192
20 CC Glass Syringe	#33193
30 CC Glass Syringe	#33194



## CHROME PUMP BARREL SYRINGE

Chrome Pump, Glass Barrel. Chrome-plated case with removable glass barrel; can easily be taken apart for cleaning.

50 CC #30296





# Brushes

## BRUSH KIT

### A. $\frac{3}{16}$ " Lip & Eye Lining Brush

This short-handled red sable brush gives precise marginal control for applying lip rouge or eye shadow. Plastic sleeve protects brush when not in use. Length  $4\frac{5}{8}$ "

### B. $\frac{1}{8}$ " Lip Lining Brush

Chisel-point red sable. Long-handled. Deposits sharp-edged line of color. Gives pin-point control for lip lining, shading, highlighting. Excellent for blending in narrow delineations, too. Length 7"

C.  $\frac{1}{2}$ " Stippling Brush Flat red sable. Recommended for brushing on tints and stippling coarser pores around the mouth. Length  $7\frac{1}{2}$ "

### D. $\frac{1}{4}$ " Lip Lining Brush

standard width chisel-point lip liner bristled with fine red sable. Length  $7\frac{1}{8}$ "

### E. $\frac{1}{16}$ " Fine Lining Brush

A very responsive fine-pointed red sable brush. Gives perfect control in the most delicate cosmetic applications. Springy, full-bristled with ample color-carrying capacity. Length  $7\frac{1}{8}$ "

### F. $\frac{1}{4}$ " Round Tinting Brush

A fine-pointed, springy sable brush designed for depositing and distributing liquid pigments over confined areas. Gives precision linear and edge control. Bristles closely resemble human hair and may be used in restorative replacement of eyebrows and eyelashes. Length 8"

### G. $\frac{1}{4}$ " Powder Dusting Brush

Short-handled, full bristled goat hair in a medium sized dusting brush. Perfect for applying finishing talcums over waxed areas and for general powder-dusting uses. Length  $5\frac{1}{2}$ "

H. Complete set of 7 brushes shown #30390







# Brushes



## 1" UTILITY DUSTING BRUSH

A long-handled badger bristle brush with flat oval profile. Serves as a fine general purpose duster. May be used in all applications except on waxed surfaces. Length 9<sup>3</sup>/<sub>4</sub>" #30897

## 3/4" TINTING BRUSH

Broad flat profile China bristle for brushing liquid cosmetic pigments or light-bodied creams over extensive areas. Length 8<sup>1</sup>/<sub>2</sub>" # 35510



## 1" & 2" LIQUID SPREADER

Full-bodied, flexible China bristle for applying liquid pigments and light creams to small areas. Length 8<sup>1</sup>/<sub>4</sub>"  
A. # 37611 B. # 37612

## 1/2" COARSE STIPPLING BRUSH

Standard grade flat white bristle brush. Recommended for stippling areas characterized by coarse pores or deep lines. Length 6<sup>5</sup>/<sub>8</sub>"  
A. # 36084 B. # 36086







# Scissors



## ARTERY & VEIN SCISSORS

All stainless steel. One serrated jaw. 4 1/2" #30151

## POINTED SCISSORS

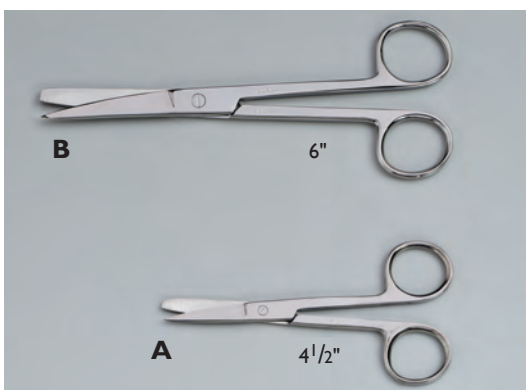
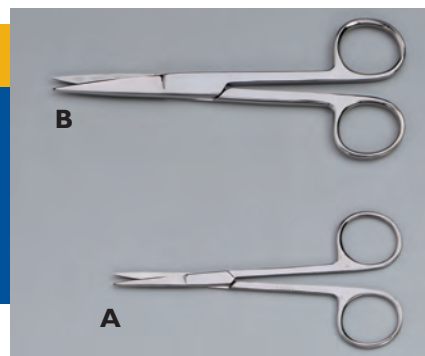
All stainless steel.

A. 4 1/2" Sharp/Sharp pointed scissor

#31524

B. 6" Sharp/Sharp pointed scissor

#31526



## POINTED SCISSORS

All stainless steel.

A. 4 1/2" Sharp/Blunt pointed scissor

#31534

B. 6" Sharp/Blunt pointed scissor

#31536

## CURVED SCISSORS

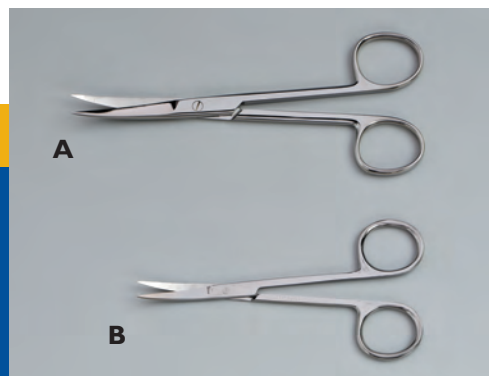
All stainless steel.

A. 6" curved scissor

#30153

B. 4 1/2" curved scissor

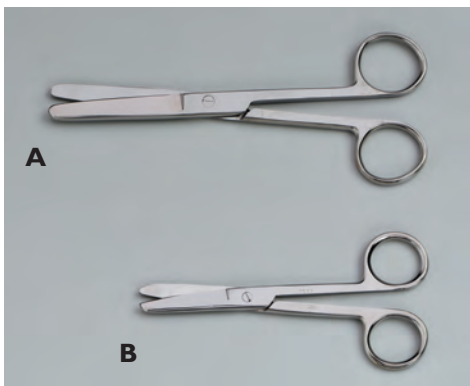
#30355







# Scissors



## UTILITY SCISSORS

All stainless steel.

A. 6" Blunt/Blunt pointed scissor #31546

B. 4 1/2" Blunt/Blunt pointed scissor #31544

## ANGULAR SCISSORS

All stainless steel.

A. 5 1/2" angular scissor

#30371

B. 5 3/4" bandage scissor

#30372



## BARBER SCISSORS

All stainless steel.

#30375

## EMERGENCY CRASH SCISSORS

These heavy-duty, angular bandage scissors will easily cut through heavy or multiple layers of cloth and zipped clothing. So strong they will slice through a copper penny with ease and yet are accurate enough to be used when precision cutting is needed.

#30159







# Hemostats & Forceps

## NEEDLE FORCEPS

Stainless steel 6 1/4"

#142



## HEMOSTAT

Stainless steel 5 1/2" medium point

#142-A



## CURVED HEMOSTAT

Stainless steel 5 1/2" medium point

#908



## FIXATION FORCEPS

3-hole stainless steel. The holes are 3/32", 3/16" and 1/8" in diameter.

#42840

## FIXATION FORCEPS

2-hole stainless steel. The large hole is 1/4" in diameter, small hole is 1/8" in diameter.

#30200







# Forceps



## PACKING FORCEPS

Stainless steel 1" curved.

#150

## CURVED ARTERIAL FORCEPS

Stainless steel 4 1/2" fine point

#295



## STRAIGHT FORCEPS

Stainless spring steel

A. 5 1/2" forceps #31455

B. 4 1/2" forceps #30145

## STRAIGHT FORCEPS

Stainless spring steel

A. 12" forceps #31453

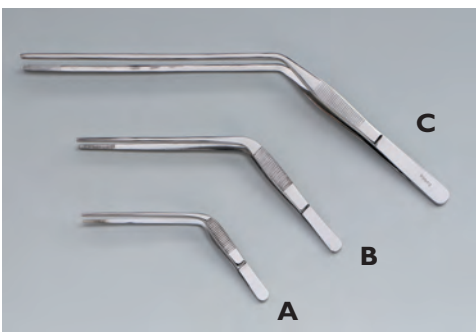
B. 10" forceps #31452



A



B



## ANGULAR VEIN & DISSECTOR FORCEPS

Stainless steel. Available in three sizes

A. Small: 5" overall, 2 1/2" working length

(good for infant drainage)

#30295

B. Medium : 7 1/2" overall, 4" working length

#30297

C. Large: 10 1/2" overall, 7" working length

#32012



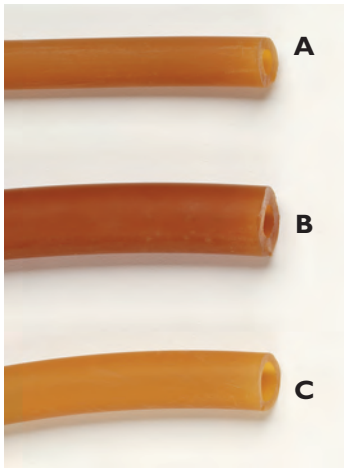
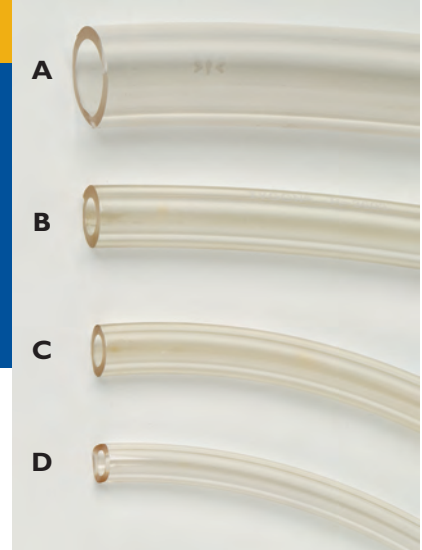
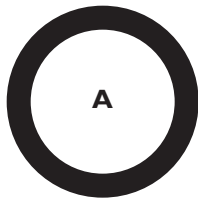


# Tubing

## CLEAR PLASTIC TUBING

Item	Inside Diameter	Outside Diameter	Wall Thickness	Cat. #
A. Splash Tubing	3/4"	1"	1/8"	38001
B. Aspiration, Drainage Cavity Injection Tubing	3/8"	5/8"	1/8"	0396
C. Standard Arterial Tubing	5/16"	7/16"	1/16"	0400
D. Small Bore Arterial	1/4"	3/8"	1/16"	0399

Sold in 5 ft increments only



## LATEX AMBER TUBING

Item	Inside Diameter	Outside Diameter	Wall Thickness	Cat. #
A. Cavity Aspiration Tubing	5/16"	11/16"	3/16"	3151
B. Cavity Injection, Drainage Duotronic Tubing	5/16"	9/16"	1/8"	3141
C. Standard Arterial Tubing	1/4"	1/2"	1/8"	0316

Sold in 5 ft increments only



## HIGH PRESSURE TUBING

Small bore. Reinforced with braided synthetic fabric. Use: primarily with the Mark V and PE-10. 3/16" inside diameter, 3/8" outside diameter, 3/32" wall thickness.

#9111936



## ASPIRATOR SPLASH TUBING

Latex, flexible, max. 3 ft. lengths. 1" diameter, 1/32" wall.

#38000





# Arterial Tubes

## THREADED HUB WITH TIE RING

Each tube is available in four sizes listed below. All with 2" working length.

Small	$\frac{3}{32}$ " O.D.	#935
Medium	$\frac{1}{8}$ " O.D.	#934
Large	$\frac{3}{16}$ " O.D.	#933
X Large	$\frac{1}{4}$ " O.D.	#930

Also available with slip hub.



## THREADED HUB WITHOUT TIE RING

Each tube is available in four sizes listed below. All with 2" working length. Also available with slip hub.

- A.  $\frac{1}{4}$ "
- B.  $\frac{3}{16}$ "
- C.  $\frac{1}{8}$ "
- D.  $\frac{3}{32}$ "

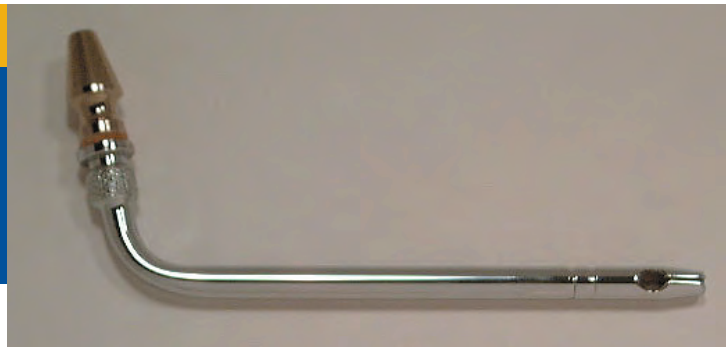
#361

## 6" CURVED SLIP HUB

Working length approx. 4"

Small	$\frac{3}{32}$ " O.D.	#903-C
Medium	$\frac{1}{8}$ " O.D.	#902-C
Large	$\frac{3}{16}$ " O.D.	#901-C

Also available with threaded hub.



## 6" STRAIGHT SLIP HUB

Working length approx. 4"

Small	$\frac{3}{32}$ " O.D.	#903
Medium	$\frac{1}{8}$ " O.D.	#902
Large	$\frac{3}{16}$ " O.D.	#901

Also available with threaded hub.







# Arterial Tubes

Infant Tubes

## SLIP HUB, BLUNT POINT

2" working length.

1/16" O.D. #925

Also available with threaded hub.



## SLIP HUB, PROBE POINT

2" working length.

1/16" O.D. #924

Also available with threaded hub.





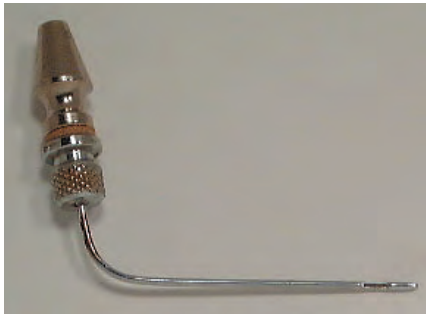
# Arterial Tubes

Radial, Luer-Lok & Hairpin

## RADIAL TUBES/THREADED HUB

2" working length,  $\frac{1}{16}$ " O.D.

#927



## RADIAL TUBES/SLIP HUB

2" working length,  $\frac{1}{16}$ " O.D.

#928

## LUER-LOK HUB TUBE

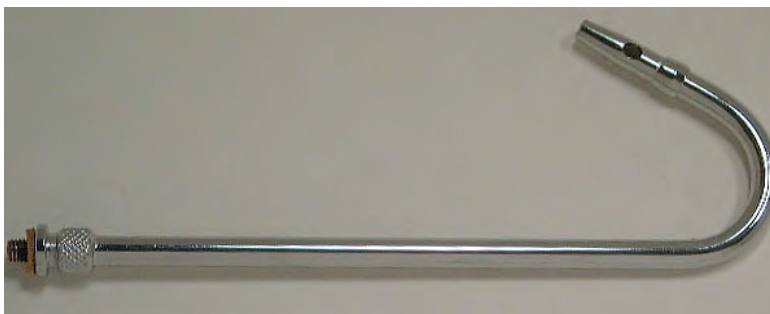
Working length approx. 2"

Small  $\frac{3}{32}$ " O.D. #963

Medium  $\frac{1}{8}$ " O.D. #962

Large  $\frac{3}{16}$ " O.D. #961

X Large  $\frac{1}{4}$ " O.D. #960



## HAIRPIN ARTERIAL TUBES

Working length approximately  $1\frac{1}{4}$ ". A unique type of tube designed to avoid interference with drain tubes.  $5\frac{3}{4}$ " overall length. Available in threaded hub type only, but can be adapted to slip hub.

Small  $\frac{1}{8}$ " O.D. #9485

Medium  $\frac{3}{16}$ " O.D. #9475

Large  $\frac{1}{4}$ " O.D. #9465

X Large  $\frac{5}{16}$ " O.D. #9455





# Arterial Tubes

## Carotid Tubes

### 4" THREADED HUB CAROTID ARTERIAL TUBE

Working length approx. 2"

Small	$\frac{3}{16}$ " O.D.	#933-T
Medium	$\frac{1}{4}$ " O.D.	#930-T
Large	$\frac{5}{16}$ " O.D.	#931-T



### 4" SLIP HUB CAROTID ARTERIAL TUBE

Working length approx. 2"

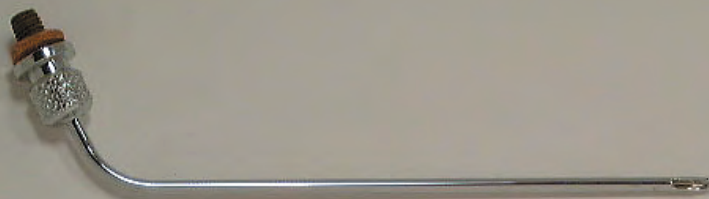
Small	$\frac{3}{16}$ " O.D.	#9335
Medium	$\frac{1}{4}$ " O.D.	#9305
Large	$\frac{5}{16}$ " O.D.	#9315



### 6" THREADED HUB CAROTID ARTERIAL TUBE

Working length approx. 4"

Small	$\frac{1}{4}$ " O.D.	#103
Large	$\frac{5}{16}$ " O.D.	#104



### 6" SLIP HUB CAROTID ARTERIAL TUBE

Working length approx. 4"

Small	$\frac{1}{4}$ " O.D.	#1035
Large	$\frac{5}{16}$ " O.D.	#1045







# Gloves

	Description	Textured Grip	Length	Rolled Cuff	With Powder	Quantity Sold	Size	Cat. #
	<b>Heavy Autopsy</b> 19 mils.	Yes	14"	No	No	Per Doz	Sm	32606
							Md	32607
							Lg	32608
	<b>Standard Autopsy</b> 17 mils.	Yes	12"	No	No	Per Doz	Sm	32620
							Md	32621
							Lg	32622
							X Lg	32623
	<b>Blue Nitrile Glove</b> 13 mils. The highest quality disposable glove available.	Yes	9"	No	No	Box (25 pair)	Sm	32614
							Md	32615
							Lg	32617
							X Lg	32619
	<b>Surgical Latex</b> 12 mils.	No	9"	Yes	No	Per Doz		32600
	<b>Nitrile Disposable</b> 8 mils. Not required by OSHA for use with formaldehyde. Complies with OSHA for working with gluteraldehyde.	No	12"	Yes	Yes	Box (25 pair)	Sm	32630
							Md	32631
							Lg	32632
							X Lg	32633
	<b>Heavy Knit</b> mils.	Yes	9"		No	Per Pair	Sm	32640
							Md	32641
							Lg	32642
							X Lg	32643





# Protective Wear



## DISPOSABLE POLYETHYLENE APRON

Low cost aprons which dispense from a convenient service pack. Made of 3-gauge white vinyl.

#30611

## RE-CYCLEX BARRIER GOWN

RE-CYCLEX re-usable gown offers outstanding protection from blood and other body fluids. The RE-CYCLEX fabric provides a barrier that is highly fluid resistant and withstands the strikethrough pressures normally associated with disposable gowns. Made of a 100% micro-fiber fabric that affords breathability and reduces heat buildup between gown and skin. This gown has an anti-microbial finish, which helps eliminate bacterial growth. Heavy-duty knit cuffs are full double stitched seams, full length, high collar and full ties in rear of gown. Gown will withstand 100 washings and still maintain its fluid resistance. Has been rigorously tested in the hospital environment. Available in Small, Medium, Large, X-Large and XX-Large



#30930



## DISPOSABLE POLYETHYLENE GOWN

A real economy, one use non-reusable plastic gown with cuff loop design prevents leakage between glove and sleeve. Ideal for wearing over a coated surface gown. One size fits all. Sold 20 per box, comes individually wrapped in a dispenser pack.

#30900

## NON-COATED GOWN

An economy blue polyolefin non-coated surface gown. Open back, knit cuff, neck and waist tie. Small, medium, large and extra large. Sold in lots of one dozen only.

#30910







# Protective Wear

## COATED FRONT GOWN

A poly laminated protection gown, has elastic cuffs, neck and waist tie, has a repellent surface. Sizes small, medium, large, extra large, xx-large, and xxx-large available on special order. The xxx-large is 49 inches long. Sold in quantities of one dozen only.

#30915



## REUSABLE LAB COAT

Reusable white lab coat, is a three layered laminate. Has knit cuffs, a fold down collar, snap front three-pocket design. Ideal for dressing and cosmetizing. Available in small, medium, large and extra large.

Special Order



## SURGEONS STYLE CAP

A surgeons style cap with ties in back. Fluid protection from the outside, and absorbs from the inside. One size fits all.

#40923

## BOOT COVERS

A true boot cover, covers complete foot and up to the knee. Boot is made of fluid impervious polyethylene fabric, is no-skid and anti-static. Covers shoe sizes from 8 to 13. Sold in bulk packs of 25 pair per case.

#30922







# Protective Wear



## SURGEONS' PANTS & SHIRTS

Disposable surgeons' scrubs in a comfortable blue polyolefin material. Short sleeves, drawstring waist, non-coated surface. Can be used for several wearings in the prep room. Very comfortable under your protection gown. Dispose of when necessary. Available in sizes small, medium, large x-large, and xx-large.

#30950

## POLYOLEFIN-COATED GOWN

NEXT-GEN group from Kapler; this is a standard hospital procedure gown. This gown has serged seams, with adjustable velcro neck closure, is 47" in length with knit cuffs, full back and waist tie. Is chemically repellent. Has everything that you will need for the preparation room. Sold in quantities of half dozen. sizes are small, medium, large and x-large.

#30935

## FULL FACE SPLASH SHIELD

Disposable. Thorough splash protection, yet lightweight, comfortable, and economical. Weighs less than 1 ounce. Anti-fog, optically clear, and distortion free. Excellent over glasses. completely adjustable Velcro strap.



#40960



## EYE SHIELD & MASK COMBO

Offers excellent protection against a majority of bacterial particles, including tuberculosis. This mask/shield features double ear loops, so it goes on and off easily.

#40965





# Plastic Undergarments



## SLEEVES

Vinyl plastic sleeves, one size only. Covers from wrist to above elbow. 18" long. Elastic on both ends. One dozen.

Clear: #30647

White: #30645

## STOCKINGS

Stop leakages and odors in gangrenous, ulcerous and dropsical cases. Made of vinyl plastic. Sizes: Large, Medium and Small. Please specify size. Unit of one dozen pair.

Clear: Small-#36441; Med-#36442; Large-#36443

White: Small-#36541; Med-#36542; Large-#36543



## PANTS

These vinyl pants offer definite insurance against all leakage and odors in cancerous, ulcerous and all putrefactive cases. Impervious to chemicals. Sizes: Large, Medium and Small. Please specify size. Unit of one dozen pair.

Clear: Small-#36431; Med-#36432; Large-#36433

White: Small-#36531; Med-#36532; Large-#36533

## COVERALLS

Made of vinyl that is impervious to chemicals. Indispensable for autopsied and posted cases for preventing leakage and odors. Sizes: Extra Large, Large, Medium and Small. Please specify size. Unit of 6 pair.

Clear: Small-#36451; Med-#36452; Large-#36453; X-Large- #36454

White: Small-#36551; Med-#36552; Large-#36553 X-Large- #36554



## UNIONALLS

Made of vinyl that is impervious to chemicals. Indispensable for autopsied and posted cases for preventing leakage and odors. Please specify size.

Clear: Small-#36461; Med-#36462; Large-#36463; X-Large- #36464







# Scalpels



## BLADES LISTED IN SECTION BELOW FIT ONLY HANDLES LISTED IN SECTION BELOW

#10 Blade	Cat. #2227	#13 Blade	Cat. #2210	#7 Handle	Cat. #42237
#11 Blade	Cat. #2228	#14 Blade	Cat. #2211	#3 Handle	Cat. #42834
#12 Blade	Cat. #2229	#15 Blade	Cat. #2212		

## BLADES LISTED IN SECTION BELOW FIT ONLY HANDLES LISTED IN SECTION BELOW

#20 Blade	Cat. #2230	#23 Blade	Cat. #2233	#6 Handle	Cat. #42236
#21 Blade	Cat. #2231	#24 Blade	Cat. #2234	#4 Handle	Cat. #42235
#22 Blade	Cat. #2232	#25 Blade	Cat. #2236		

## BLADES LISTED IN SECTION BELOW FIT ONLY HANDLES LISTED IN SECTION BELOW

#26 Blade	Special Order	#7 Handle	Special Order
#27 Blade	Special Order		



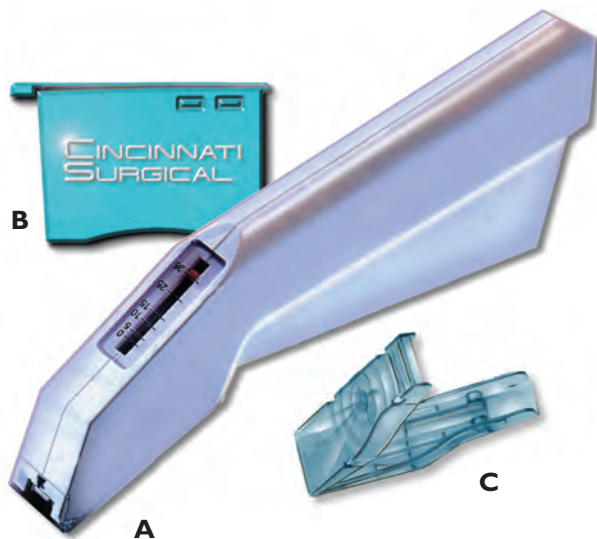


# Scalpels

## DISPOSABLE SCALPELS & BLADES

#10	#42310
#11	#42311
#12	#42312
#15	#42315
#20	#42326
#21	#42321

Sold in boxes of ten handles and blades.



## STAPLER & SCALPEL BLADE ACCESSORIES

### A. Post-Mortem Stapler

This post-mortem stapler features an easy to read staple counter, an arrow guide for accurate placement and a low profile for a clear view of the work area. #44103

### B. Surgical Blade Remover

The surgical blade remover assists in the safe removal of blades, thereby greatly reducing the risk of injury and infections. Packaged 10 per box. #44102

### C. Blade Safe

The blade safe helps keep the blade protected while not in use. #44100





# Prep Room Instruments



## GRAVITY INJECTOR

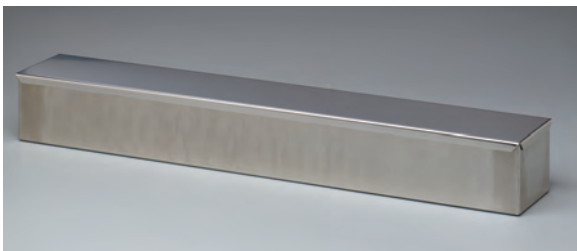
Four liter percolator made of Nalgene (laboratory plastic). With metal bale. Use with Cat. #0316 latex tubing. Valentine tube with tapered end no longer available.

#30347

## INCISION SPREADER

Designed expressly for embalming. Angular design permits insertion without obstructing drain or arterial tubes.

#40386



## INSTRUMENT TRAY

30" Tray has flat bottom for placement on counters. Complete with lid. Stainless steel.

#1044

## INSTRUMENT TRAY

31" long. Made of white PVC material. Comes complete with lid.

#1050







# Prep Room Instruments



## WOOD HANDLED SPATULAS

This pair of fine professional instruments has blades ground to meet all technical requirements. The handles are high quality rosewood, and the blades are steel. The smaller blade is 2 1/4" and the longer blade measures 3 1/2"

A. #33682

B. #33683

## JUGULAR SUPER DRAIN TUBES

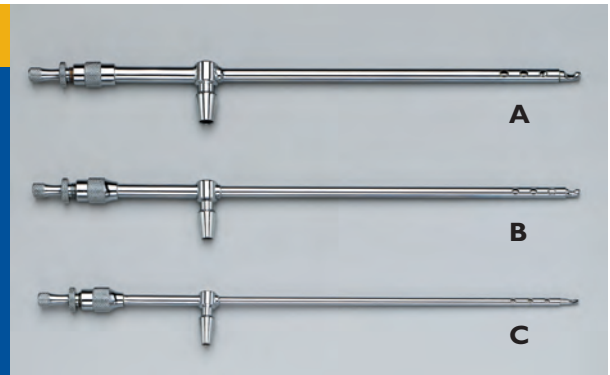
These tubes are universally accepted instruments because of their free bore, relief chamber, eccentric probe point, metallic seal and articulated pistons. Packed with long fiber asbestos with flake graphite, ideal for sealing as well as lubricating. Excellent clot breaking capacity and suction actions. working length from approximately 7" down to 5."

# 305 – 5/16"

# 306 – 3/8"

# 307 – 1/4"

# 308 – 3/16"







# Crucifixes

**L**-Line Crucifixes are available in a variety of styles and finishes, with designs for virtually every Christian faith. Styles include interior walnut and metal crosses as well as exterior walnut and metal crosses. All crosses have curved backs to fit any casket and cellular strips for easy application. All crosses come individually boxed.





# Crucifixes

## INTERIOR CROSSES—WOOD

### Risen Christ, Orthodox, Traditional, Plain & Praying Hands

Interior Wood Crosses measure approximately 5" x 10" (510)

Walnut Crucifix with zinc die casting electroplated in a variety of finishes.

O—Bronze, C—Copper, S—Silver, G—Gold

All crosses are individually gift boxed.



\*Indicates Cross Shown





# Crucifixes

## INTERIOR CROSSES—METAL

### Risen Christ, Traditional, Praying Hands, Plain & Masonic

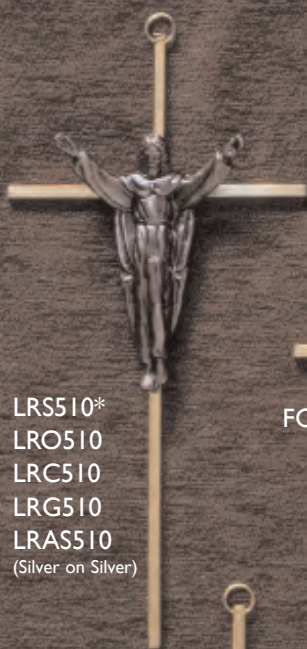
Interior Metal Crosses measure approximately 5" x 10" (510)

The Cross is solid brass  $\frac{3}{16}$ " sq. polished and lacquered or silver finish.

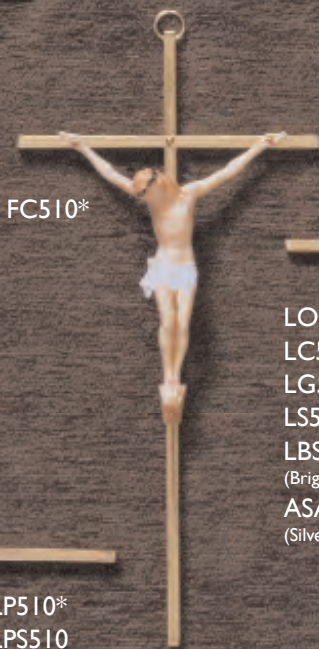
Zinc die castings are electroplated in a variety of finishes.

O—Bronze, C—Copper, S—Silver, G—Gold

All crosses are individually gift boxed.



LRS510\*  
LRO510  
LRC510  
LRG510  
LRAS510  
(Silver on Silver)



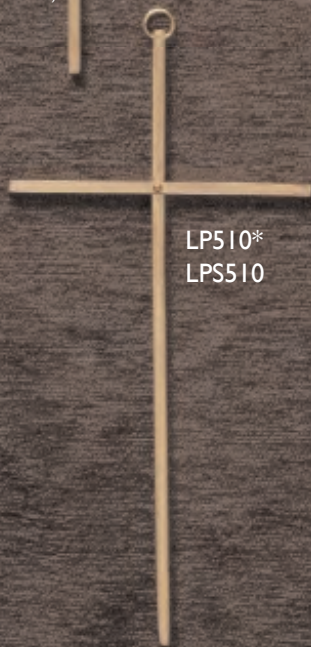
FC510\*



LO510\*  
LC510  
LG510  
LS510  
LBS510  
(Bright Silver)  
ASA510  
(Silver on Silver)



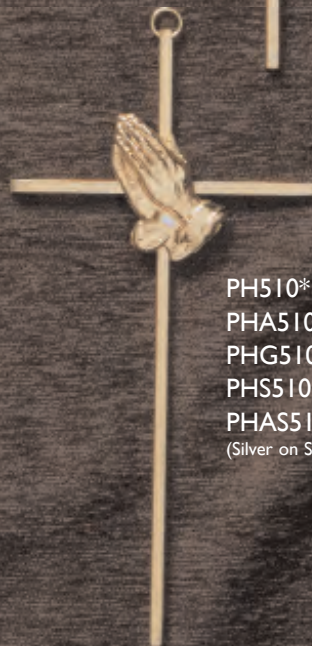
RO510\*  
RC510  
RG510  
RS510  
RAS510  
(Silver on Silver)



LP510\*  
LPS510



LMO\*  
LMS



PH510\*  
PHA510  
PHG510  
PHS510  
PHAS510  
(Silver on Silver)

\*Indicates Cross Shown





# Crucifixes

## EXTERIOR CROSSES—SLIM LINE SEALERS

### Risen Christ, Traditional & Plain

Exterior Walnut Crosses measure approximately 6" x 12" (612),  
have curved backs to fit any casket and cellular strips for easy application.

O—Bronze, C—Copper, S—Silver, G—Gold

All crosses are individually gift boxed.



\*Indicates Cross Shown





# Crucifixes

## EXTERIOR CROSSES—SLIM LINE SEALERS

### Risen Christ, Orthodox & Traditional

Exterior Crosses measure approximately 6" x 12" (612) or 7 1/4" x 13 1/4" (714)

612 Crosses are available in zinc die casting or walnut. 714 Crosses are available in zinc die casting.

All crosses have curved backs to fit any casket and cellular strips for easy application.

Zinc die castings are electroplated and come in a variety of finishes.

O—Bronze, C—Copper, S—Silver, G—Gold



\*Indicates Cross Shown





# Crucifixes

## INTERIOR/EXTERIOR CROSSES—SEALERS

### Risen Christ & Traditional

Walnut Crosses measure approximately 6" x 12" (612).

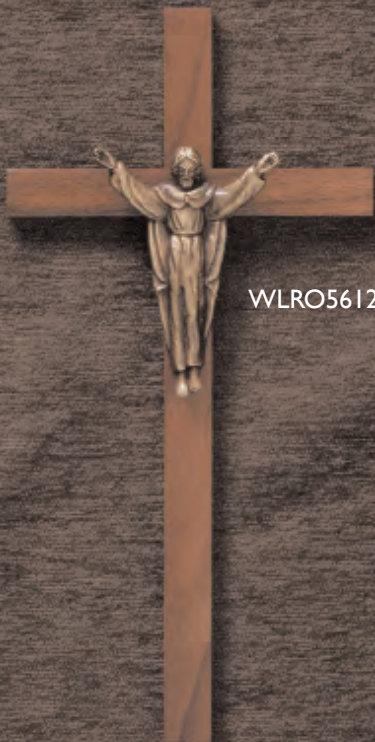
All crosses have curved backs to fit any casket and cellular strips for easy application.

The corpus is zinc die casting, electroplated and available in a O—Bronze or S—Silver finish.

All crosses are individually boxed.



WASA612\*



WLRO5612\*



WO5612\*

\*Indicates Cross Shown





# Funeral Home Supplies

While it is just about impossible to anticipate all of the requirements of any Funeral Home, we have included in this section a broad range of items to help make the task of ordering from one source easier for you. We recognize that we have not included every item that you may use and need. However, we can obtain almost any piece of equipment you may require...so just order what you want from your ESCO salesman...we will do the rest.

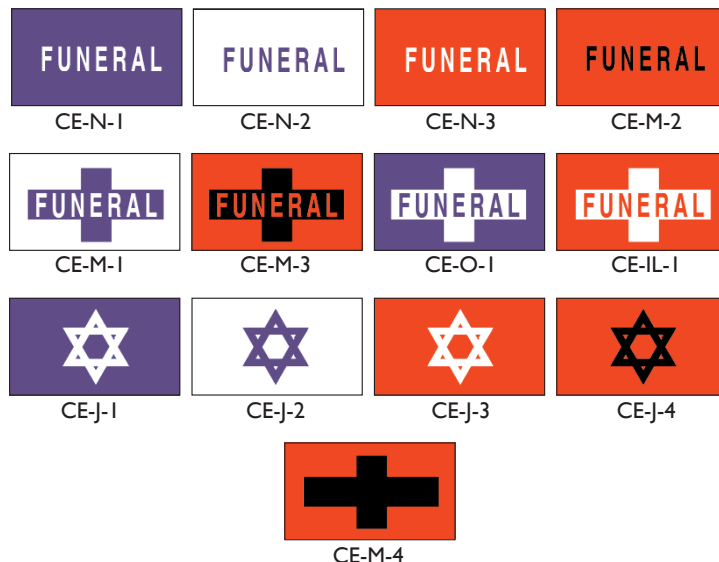




# Funeral Procession Aids

## STOCK BANNERS

- CE-N-1 "Funeral" in white, purple background
- CE-N-2 "Funeral" in purple, white background
- CE-N-3 "Funeral" in white, orange background
- CE-M-2 "Funeral" in black, orange background
- CE-M-1 "Funeral" in purple cross, white background
- CE-M-3 "Funeral" in black cross, orange background
- CE-O-1 "Funeral" in white cross, purple background
- CE-IL-1 "Funeral" in white cross, orange background
- CE-J-1 Star of David in white, purple background
- CE-J-2 Star of David in purple, white background
- CE-J-3 Star of David in white, orange background
- CE-J-4 Star of David in black, orange background
- CE-M-4 Solid black cross, orange background



## MAGNETIC FUNERAL FLAGS

Fix-A-Post Magnetic Funeral Flags have a rust-proof shaft and a round plastic-covered base that will hold on all metal and many vinyl-covered car tops. Contact area is specially-prepared to prevent scratching of car surface. Choice of any small stock banner (6" x 9") on right.

- CE 1903 Flexo-flag, nylon banner, spring shaft, magnetic base
- CE 1905 Flag carrier
- CE 1906 Flag carrier with handle (holds 2 dozen flags)
- CE 1907 Banners only (order by number at right)
- CE 1908 American Flag small banner (6" x 9"), nylon, with magnetic base and staff
- CE 1909 American Flag small banner (6" x 9") only

- CE-LEAD Large 9 1/2" x 17" Banner (order by number at right, adding "L" at end of product number), including double magnetic base
- CE-AMN Same as above, with nylon American Banner, includes double magnetic base
- CE 1905-N Nylon American Banner only, 9 1/2" x 17"
- CE 1902-C Cotton American Banner only, 9 1/2" x 17"
- CE 1902-L Stock Lead Car Banners only, 9 1/2" x 17" (order by number at right)





# Hearse Signage

## ALUMINUM NAME PLATES



A distinguished way to positively identify your vehicles. Available in polished or satin finished letters with edges and back painted black. Please specify Vise or Livery (1/4" bar) or Pin Center (1/2" bar). When ordering, note the distance from center to center of the brackets mounted in the car to determine the length of the name plate bar. Script nameplates with letters extending below the bar can be cast at no extra charge, with lugs on the bar to fit the brackets and accommodate these letters. Unless otherwise specified, plate will be made to fit brackets that are mounted 12" center to center. Many custom styles, including Bright Chrome and Brass-plated name plates also available.

### Open Letter Styles

1 1/2" Block, 1 1/2" Condensed, 1 1/2" Broadway and 1 1/2" slant letter styles available in the following sizes (all capital letters)

- 17" Plate, holds 12 letters & spaces
- 26" Plate, holds 20 letters & spaces
- 36" Plate, holds 29 letters & spaces

2" Block letter style available in the following sizes (all capital letters or caps and lowercase, please specify)

- 17" Plate, holds 8 letters & spaces
- 26" Plate, holds 13 letters & spaces
- 36" Plate, holds 18 letters & spaces

3" Script and 2" Old English letter styles available in the following sizes (capital letters and lowercase, please specify)

- 17" Plate, holds 9 letters & spaces
- 26" Plate, holds 15 letters & spaces
- 36" Plate, holds 20 letters & spaces

4" Block letter style available in the following sizes (all capital letters)

- 17" Plate, holds 5 letters & spaces
- 26" Plate, holds 8 letters & spaces
- 36" Plate, holds 12 letters & spaces

### Solid Plate Style

Raised letters over a solid black background, available one line of text or two lines of text.

### Decorative Styles

Torch, 7 1/2" x 2 1/2"

Wreath, available with or without letter in center, 9 1/2" x 9 1/2"

### Mounting Brackets

Facilitates mounting nameplates in vehicles. brackets sold in sets or four.

No.1 #101 – Vise or Livery type for use inside windows

No.2 #201 – Converts from Pin Center to Vise or Livery type mounting

No.4 #401 – For use with pins

No.5 #501 – For outside mounting

### Groove Board Hearse Name Plate

Change the name simply by changing the letters. Stainless Steel binding with generous lip for window mounting. Black Felt standard. Two sizes available (not shown).

CC 4GB-24 24" x 4" Groove Board Name Plate

CC 4GB-27 27" x 4" Groove Board Name Plate





# Body & Casket Lifters

## SAMPSON "ONE MAN" HYDRAULIC BODY & CASKET LIFTER

Extra-heavy-duty casket and body lifter will easily handle up to 600 lbs. By turning the handle you can expand the adjustable base from 32" to 42". With its six 4" swivel casters, you can maneuver this body lifter through a 32" wide door with ease. Comes with four 2" washable nylon web body straps, which adjust to the girth of almost any body. The two straps that go under the body are attached to a wand—just slip the wand under the body and straps follow with ease. Two 2" nylon web straps are also included for lifting caskets. You can even lift a casket off



the top of a two-tier rack. Heavy-duty hydraulic jack will lift the heaviest body from floor to cart or table with virtually no effort. Extra-sturdy all-steel tubular construction, with enamel finish. One year guarantee.

CB7720 Sampson Hydraulic Body & Casket Lifter, with four body straps and two casket straps



## COLLAPSIBLE CHURCH TRUCK

Made of a strong, rectangular aluminum tube, this truck features a protective anodized finish that keeps the truck looking bright and shiny-new as well as making it easy to clean. the stable X-frame undercarriage and rubber rests help to secure the casket. Six-inch rubber tires roll easily over carpet, sills and other obstacles with quiet dignity. When moved without a casket, a special built-in handle allows the truck to be pushed, pulled or carried without the attendant having to bend over. The truck locks in four positions allowing a wide range of casket sizes to be displayed with one truck. the additional length also increases stability and makes an attractive appearance. Available in silver, bronze, blue-grey or gold finish (please specify). Maximum length 61 1/4", folds to 6 1/4" long. Maximum load 1,000 lbs. Optional decorative drapes & frames available.

CE 87 Collapsible Church truck

CE 87-870 Optional Black Vinyl Church Truck Storage Cover—protects collapsible church truck when not in use







# Mortuary Cots

## MULTI-LEVEL, ONE-MAN MORTUARY COT

Designed to allow one person to perform retrieval. Special release levers allow a single operator to raise and lower the cot without having to support the full weight of the cot and body. Legs unfold and lock automatically when unloading the cot, then fold back quickly when the cot is loaded back into the vehicle. In tight areas, the cot doubles as a highly-maneuverable, two-wheeled stretcher when the undercarriage is folded and locked. It slides down stairs easily in this position with built-in stair glides. the foot rest assists with going down stairs. the multi-level feature allows the body to move easily from bed to cot. The cot also allows a portable stretcher to lie evenly in place. Comes complete with one-inch burgundy mattress and two five-foot-long, two-piece, burgundy quick-release restraining straps. 77" long, 20 1/2" wide. 32 1/4" maximum height, folds to minimum height of 9 1/4". Loading height 23"-26". maximum load 400 lbs.



CE 24 Multi-Level Cot

CE 24-H Same as above, but with loading height 27"-31" for high-floor coaches



## FIRST CALL COT

A very maneuverable cot, with folding end that shortens the cot by 15", and tapered head section that makes tight corners and narrow doorways easier to navigate. Also allows easy access to the body. Multi-level undercarriage provides flexibility in retrieval. Loading-end wheels can be locked when necessary. Comes with a 1" thick burgundy mattress and two burgundy restraints. 78 3/4" long, 22" wide, 33 1/2" high, folds to minimum height of 9". Maximum load 400 lbs.

CE 27-I First Call Cot

*End section folds, shortening the cot by 15" to improve maneuverability.*





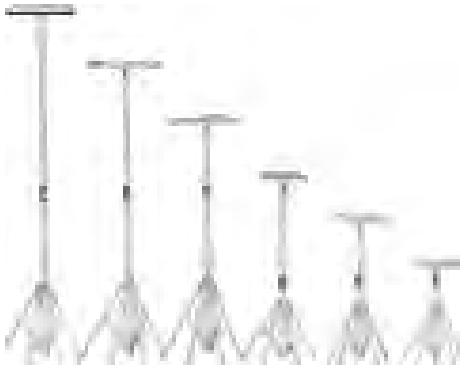
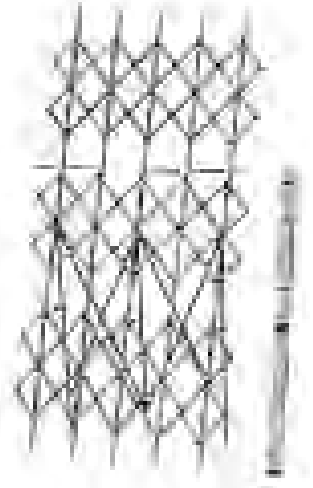


# Floral Display Systems

## ORIGINAL POPULAR A-RACKS

Available in three widths—30", 50" and 70", each with optional 30" height extensions. Spray hooks hold floral pieces securely, spring conceals hook when not in use. Folds flat for easy storage.

CE A-30	62" high x 30" wide
CE A-3-I	30" high x 30" wide height extension
CE A-50	62" high x 50" wide
CE A-5-I	62" high x 50" wide height extension
CE A-70	62" high x 70" wide
CE A-7-I	62" high x 70" wide height extension
CE A-CASE	Carrying Case for A Racks



## TYPE D STANDS

Available in two adjustable height ranges. Four legs with rubber feet to protect floor surfaces. 8" and 12" diameter round heads are interchangeable.

CE XLD-3-8	adjusts from 24" to 38" high, 8" diameter head
CE XLD-3-12	adjusts from 24" to 38" high, 12" diameter head
CE XLD-4-8	adjusts from 36" to 64" high, 8" diameter head
CE XLD-4-12	adjusts from 36" to 64" high, 12" diameter head
CE XLD-66	set of 3 of each size (6 total stands), 8" diameter head
CE XLD-77	set of 3 of each size (6 total stands), 12" diameter head
CE2531 HDCC	carrying case for six stands
CE2532 HDCC	carrying case for six heads

## LADDER RACKS

The elegance and simplicity of this sturdy display rack allows you to use it in any setting, from casual to formal. Constructed of polished gold-anodized aluminum tubing with wood-grain finished shelves, this ladder rack is available in three sizes, and has an optional extension that quickly and easily adds additional display space.

CE XL-1251	46" ladder with 3 shelves
CE XL-1252	63" ladder with 3 shelves
CE XL-1255	75" ladder with 3 shelves
CE XL-1253	22" extension with one shelf
CE XL-1257	8" x 12" shelf
CE XL-1259	large 8" x 18" shelf
CE XL-2625	carrying case for two 46" ladders and shelves
CE XL-2627	carrying case for two 63" or 75" ladders and shelves







# Casket Displays & Miscellaneous Needs

## “NEARLY INVISIBLE” CASKET PEDESTALS

Show off the casket, not the supporting bier, with these hexagonal clear Plexiglas® pedestals. Fitting in with virtually any decor, they almost make the casket look like it's floating on air. These durable, sturdy pedestals won't collapse or tip while the casket is being transferred. For easy storage and handling, the pedestals slip inside one another. Each hexagonal pedestal is 22" high—ideal for merchandising the premium details of your finest caskets.

CE 6950

“Nearly Invisible” Casket Pedestals



## LIGHTWEIGHT CASKET DISPLAY RACK

Show off the interior of two or four caskets with these casket display racks. Made of sturdy welded steel tubing. Knocks down easily for storage or shipment. Minimal assembly required.

B60000 Two-Casket Display System, 34" wide x 48" long x 54" high

B80000 Four-Casket Display System, 66 1/2" wide x 48" long x 54" high

## MAGNETIC CASKET SPRAY HOLDER

18" x 14" treaded rubber pad with three magnetic strips that secure pad to contour of casket. Chromium-plated spikes on top of pad hold floral spray firmly in place. Waffle pattern resists movement on wood or cloth caskets.

CE RJ1670

Magnetic Casket Spray Holder



Two handles  
for balance.

## EXTENSION BABY CASE

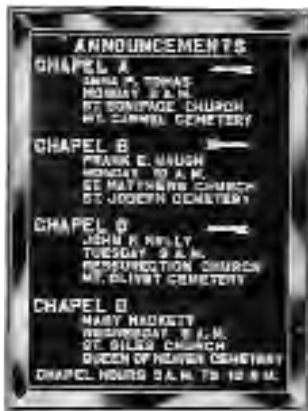
Enables you to use your personal car, eliminating the necessity for a hearse. Made of heavy plywood veneer, covered with black Leatherette and chrome-plated hardware for added support and protection. Exclusive two-handle feature for proper balance when extended. Simply loosen one thumb screw to extend case to 48". Interior is lined with water-resistant material. Closed case is 27" x long x 11 1/2" wide x 9 1/2" deep.

CB499 Extension Baby Case





#AA60	Identify each chapel by placing this stand in front of each room entrance. 15" x 12" directory on stand with sturdy base. Overall height 46". Free room identification (such as PARLOR A or ROOM B) in 1" letters (10 letter maximum).
# AA60-8	Antique Bronze finish stand with walnut framed announcement (optional double-face frame available, extra).
# AA60-9	Chrome finish stand with chrome framed announcement.
#AA60-10	Brass finish stand with brass framed announcement.
#AA60-B0	Directory with wall hangers only; no stand. Specify Brass, Chrome or Walnut frame.
#AA10-300	300 1/2" molded letters in free compartment box



So many sizes and options! Same high-quality construction as stand directories above, but in a wide variety of wall-mount forms. Each model available in the following sizes (please specify): 15" x 12", 15" x 20", 18" x 25", 20" x 30", 28" x 40". Custom sizes also available. All sizes may be ordered with grooves running in either direction for horizontal or vertical mounting, if not specified, grooves will run along first listed dimension (width). Optional colored felt or fade-proof Koroseal backgrounds available (extra). Letter sets should be ordered separately.

- |        |  |
|--------|--|
| #AA40C | Chrome frame, open face  |
| #AA41W | Walnut frame, open face  |
| #AA41B | Brass frame, open face   |
| #AA42C | Chrome frame, glass front, removable back                                |
| #AA42C | Walnut frame, glass front, removable back                                |
| #AA42B | Brass frame, glass front, removable back                                 |
| #AA47C | Chrome frame, open facet, front removable letter panel (indoor use only) |
| #AA47W | Walnut frame, open facet, front removable letter panel (indoor use only) |







# Bulbs

## SPECIALTY LIGHT BULBS

Church & Chapel stocks a wide variety of bulbs, including many hard-to-find types.

### 3-Way Mogul Base Bulbs

- CB100 100-200-300 watt bulb with red neck
- CB104 100-200-300 watt soft white bulb

### Tubular Bulbs with Edison Base

- CB130 25 watt 6" clear bulb
- CB131 25 watt 6" inside frosted bulb
- CB133 40 watt 6" clear bulb
- CB134 40 watt 6" inside frosted bulb

### Flicker-Flame Bulbs

- CB140 3 watt bulb with 2<sup>3</sup>/<sub>4</sub>" flame candelabra base
- CB141 3 watt bulb with 3<sup>3</sup>/<sub>4</sub>" flame Edison base

**Inside Reflector Bulbs** Edison base, spot or flood (used in ceiling fixtures) BR models feature bulge-style reflectors

- CB150 65 watt BR30 flood light bulb
- CB151 65 watt BR30 spot light bulb
- CB152 75 watt R30 amber bulb
- CB153 75 watt R30 blue bulb
- CB155 75 watt R30 green bulb
- CB156 75 watt R30 pink bulb
- CB157 75 watt R30 red bulb
- CB158 75 watt R30 yellow bulb
- CB159 75 watt BR40 flood light bulb

- CB160 100 watt BR40 flood light bulb
- CB161 100 watt BR40 spot light bulb
- CB162 120 watt BR40 flood light bulb
- CB163 120 watt BR40 spot light bulb
- CB164 150 watt R40 amber bulb
- CB165 150 watt R40 blue bulb
- CB167 150 watt R40 green bulb
- CB168 150 watt R40 pink bulb
- CB169 150 watt R40 red bulb
- CB170 150 watt R40 yellow bulb







# Seating Signage



## SEATING SIGNAGE

### A. Wood “Reserved” Seat Signs

The popular wood “reserved seat” sign is now back in production. Made from solid natural walnut with leaded ears, covered in maroon corduroy that form-fit onto chairs or pews. Wording is on metal plate with satin aluminum lettering on black background. Three wordings to choose from.

- CC300 “Reserved”
- CC301 “Reserved Family”
- CC302 “Reserved Pallbearer”

### B. All-Aluminum “Reserved” Seat Signs

Made from cast aluminum in natural polished chrome-like finish, with leaded ears covered in maroon corduroy that form-fit onto chairs or pews. Polished aluminum lettering on black background. Three wordings to choose from.

- CC405-R “Reserved”
- CC405-F “Reserved Family”
- CC405-P “Reserved Pallbearer”

### C. All-Aluminum “Reserved” Seat Signs

Similar to above, but with highly-polished gold finish.

- CC406-R “Reserved”
- CC406-F “Reserved Family”
- CC406-P “Reserved Pallbearer”
- CC303 Replacement ears





# Directories & Mortuary Glasses

## LETTERS & LETTER SETS

Letter sets consist of an appropriate assortment of 300 letters, supplied in compartment storage box. All styles available in 1/2", 3/4", 1", 1 1/2" and 2" sizes. Roman (AA12) also available in 3" size. The following symbols can be included in 300 letter sets by special request: "—" [dash], "%" [percent], "\$" [dollar], "." [period], and "," [comma].

- AA10 Molded Gothic Block (white)
- AA12 Roman Art (white)
- AA20 Gothic Bonite (white)
- AA21 Gothic Bonite (gold—not available in 1 1/2" or 2" sizes)

Individual letters and special symbols also available separately, in multiples of 10, minimum order 100 letters total.



## SLIP-ON SIGNS

These versatile sign measure 12" x 4" and come in a variety of finishes. Non-warping black felt groove-board accommodates all size letters. (Colored felt available at slight extra charge.) Free 1" letters to identify room (specify letters). For additional letters, see above. Specify mounting (flush, right or left) for single-face models.

- AA30 Walnut or chrome binding (available single-face only)
- AA31 Deluxe walnut (specify single-face or double-face)
- AA33 Stainless steel binding (specify single-face or double-face)
- AA34 Brass binding (available single-face only)

## REPLACEMENT RUBY MORTUARY GLASSES

Item #	Description	Top	Height	Bottom
CBFB-1	Flat closed bottom, flare top	5 1/8"	8 3/4"	3 5/8"
CBFB-2	Flat 1/4" open bottom, flare top	5 1/8"	8 3/4"	3 5/8"
CB513	Flat open bottom	3 1/4"	7"	3 1/4"
CB512	Flat open bottom	3 1/2"	9 5/8"	3 1/2"
CB840	Flat open bottom	4"	8"	4"
CB521	Round closed bottom, flare top	5 1/8"	8 3/4"	3 5/8"
CB520	Round closed bottom, flare top	4 7/8"	7 1/4"	3 5/16"
CB518	Open bottom, flare top	5 1/16"	9 1/4"	4 1/16"
CB336RB	Open bottom, engraved cross	4"	10"	4"
CB520H	Open bottom, flare top	4 7/8"	6 5/8"	3 5/16"







# Traffic Control

## PORTABLE SELF-FOLDING TRAFFIC GUIDES

Lightweight with built-in carrying handle for easy portability. Folds flat when not in use. 24" high x 10" wide. Chrome-plated metal legs with rubber tips. Sets of five include free wall bracket for convenient storage. Your choice of message or blank.

- CB6401-5 Set of 5 "Please No Parking Funeral" signs with wall bracket
- CB6402-5 Set of 5 "Funeral Parking Only" signs with wall bracket
- CB6407-5 Set of 5 "No Parking" signs with wall bracket
- CB6406-5H Set of 5 "Funeral Parking Only" signs with Handicap symbol and wall bracket
- CB6408-5 Set of 5 blank signs with wall bracket
- CB6401-I Individual "Please No Parking Funeral" sign
- CB6402-I Individual "Funeral Parking Only" sign
- CB6407-I Individual "No Parking" sign
- CB6406-IH Individual "No Parking" sign with Handicap symbol



## PORTABLE SIDEWALK STAND SIGNS

18" x 18" signs made from heavy-duty 18 gauge steel with durable baked enamel finish. Printed on both sides. Overall height 52"

- CB7501-FPO Sidewalk sign "Funeral Parking Only"
- CB7502-FNP Sidewalk sign "Funeral No Parking"
- CB7500-SP Sidewalk sign Special wording

## TRAFFIC CONES

### Rubber Traffic Cones

Lightweight traffic cones are ideal for controlling the flow of traffic. Your choice of 18" or 28" high. In solid yellow, without wording.

- CB6405-18 18" Rubber traffic cones
- CB6410-28 28" Rubber traffic cones

### Rubber Sign Tops for Traffic Cones

Tops fit on standard 28" rubber traffic cones.

- CB6425-12 Rubber Sign Tops

Your choice of available messages:

- |                           |                         |                               |
|---------------------------|-------------------------|-------------------------------|
| a. "Reserved for Funeral" | b. "Family Cars"        | c. "Funeral Parking Visitors" |
| d. "No Parking"           | e. "Funeral No Parking" | f. "Pall Bearers"             |
|                           |                         | g. Blank                      |

### Polyvinyl Traffic Cones

Similar to rubber cones above, but in Federal Orange.

- CB6415-18 18" Polyvinyl traffic cones (not shown)
- CB6420-28 28" Polyvinyl traffic cones (not shown)

Your choice of message:

- |              |                 |               |                       |
|--------------|-----------------|---------------|-----------------------|
| a. "Funeral" | b. "No Parking" | c. "Reserved" | d. Blank (no wording) |
|--------------|-----------------|---------------|-----------------------|







# Operating & Dressing Tables

## HYDRAULIC OPERATING TABLE

Hydraulic controls make adjustment easy on this operating table. Tilting and height adjustments are accomplished simply with a conveniently located foot pedal. Either end can be adjusted from 29½" to 37½" high, for easy preparation from either a standing or sitting position. The convex table top allows fluids to drain away from the body, and an extra-deep trough around the perimeter eliminates the need for splash guards. A drain in the center of the foot end quickly eliminates fluids from the table. All four 8" swivel wheels lock with a single foot pedal. Stainless steel for easy maintenance; solid surface base has no crevices where liquids can coagulate. 80" long x 30" wide. Holds up to 600 lbs.

CE101-H Hydraulic Operating Table

*All four wheels lock with the use of a single foot pedal.*



## BASIC OPERATING TABLE

Similar to the Fold Operating Table below, but doesn't fold for storage. Requires easy assembly.

CE103 Basic Operating Table

## FOLDING OPERATING TABLE

Ideal for embalming, dressing and transfer, particularly where space is at a premium. The table folds flat for storage when not in use—it stands on end and can fit easily in a closet or behind a door. Each end of the table is independently adjustable from 32½" to 38½" high, using an exclusive one-hand release. The table has a stainless steel top with convex surface, tubular steel frame and lockable 7" ball-bearing wheels. Drain is in center of foot end. 80" long x 30" wide. Holds up to 600lbs.

CE102 Folding Operating Table

*Either end can be adjusted quickly from 32½" to 38½" high.*







# Trucks & Roller Systems

## DUAL-DUTY TRUCK

Works equally well as a showroom or utility truck. Its polished aluminum frame is exceptionally strong and will look like new for years with minimal maintenance. Rubber tips hold caskets or rough boxes firmly in place. Five-inch, ball-bearing wheels roll over obstacles with ease. 47" long, 22" wide, 21" high. Holds up to 600 lbs.

CEI 10 Dual Duty Truck



## SHOWROOM TRUCK

The extra-long and wide wheelbase of this truck provides exceptional stability and performs equally well as a utility truck. The strong aluminum frame will keep its high polish for years with a minimum of maintenance. Rubber tips hold caskets or rough boxes firmly in place. Five-inch, ball-bearing wheels roll over obstacles with ease. 47" long, 22" wide, 21" high. Holds up to 600 lbs.

CEI 12 Showroom Truck

*Caskets are supported firmly on the showroom truck's rubber tips.*

## FIRST CALL POUCH

Complete with bottom, this pouch includes a full-length brass zipper. The pouch is secured by snap fastener tabs and features full-expansion restraint strap slots and polyurethane-coated nylon fabric lining. Fits One-Man® cots, standard ambulance cots and stretchers approximately 75" x 23". Available in black, burgundy or grey leatherette; and burgundy, blue or grey pinstripe Herculon.®

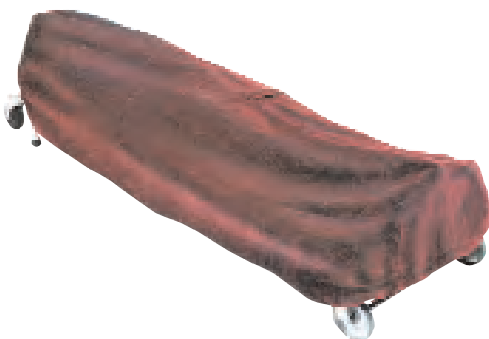
CE335 First Call Pouch



## FIRST CALL COVER

The slip-over styling of this cover fits one-man cots. Secured by elastic, the cover is reversible end-to-end. Available in black, burgundy or grey leatherette; and burgundy, blue or grey pinstripe Herculon.® Fits cots approximately 76" x 20"

CE320 Cot Cover







# Applied Embalming

By **John A. Chew, Director of Education** and **Ray LaFramboise, Director of Sales**

**E**mbalming is defined as the disinfecting, preserving and restoration of the dead human body to a natural form and color. Embalming is a temporary process which prevents, retards and controls postmortem changes known as decomposition.

Embalming bypasses the rotting stages, allowing for an eventual body breakdown through oxidation and dissolution. (Oxidation being the loss of electrons from + to -, a combination with oxygen. Dissolution being a separation of compounds.)

Sanibalming is the primary purpose of the embalming process. It interacts with intrinsic, and extrinsic, microbial agents and their enzymatic products. It also provides a neutralization for the bodies normal enzymes, which at death activate the autolysis process called self digestion.

Decomposition is an overall description of a series of processes which occur within the body's components after death.

The body is made up of elements combined to form compounds, which combine to form the basic structural unit of the body, a cell. Cells combine to form tissues, tissues combined form organs, and the organs combine to form the systems of the body.

The tripod of life is formed by three interrelated systems, the nervous, the circulatory, and the respiratory. Eight other systems are dependent on the tripod of life. However, the tripod is so dependent on itself that if any part dies, it activates a reverse process. The systems break down, followed by the organs, the tissues, the cells and the compounds, until the body reverts back to the elements.





## THE ANALYTICAL APPROACH TO EMBALMING – PRE ANALYSIS

The preparation room should be private. Only licensed personnel should be admitted during any procedure. A preparation room should be on the order of a hospital operating room, designed to provide a clean, safe working environment. The preparation room should meet all local and OSHA standards providing a safe and sanitary environment for the licensed intern and practitioner. Universal Precautions should be followed at all times. Establishment standards and sanitation measures should be followed, which must include sterilization of equipment and procedural instructions.

**Pre Analysis:** To reiterate the afore-mentioned cognitive information, and to incorporate it into practical manipulative skills associated with the art and science of embalming. The study of disease and its organic and microbial interaction through an amalgamated approach, has led you, the practitioner, to a broad understanding of the value of the analytical analysis to the embalming process.

We began with the study of anatomy, then microbiology, pathology and sanitation. Each is a necessity to the analytical approach to embalming and specific safeguards for the licensed practitioner and the general public. It is the primary goal to systematically provide the authorized practitioner with a cognitive overview of those specific, and non-specific conditions related to disease processes that may have a direct influence on the embalming process of the dead human body. Having successfully completed the initial studies of anatomy, the practitioner will have an understanding of surgical dissections required to accomplish the actual embalming. In addition the practitioner will be able to treat the autopsied, and donor bodies upon completing the total amalgamation of the learning process and ongoing confrontation with the many pre-disposing conditions associated with dying and death.

## DIAGNOSTIC CRITERIA – PRE ANALYSIS

**Overall Picture of the Body:** Size, weight, age and sex, position and shape of organs, color, surfaces and cavities, consistency of the tissues, odors, intrinsic body conditions. Overall observation by the eyes sees more than color. We see form, luster, (dry or moist) transparency, surface appearance (smooth or irregular) and overall consistency. Pigments (melanin) may alter organ appearance. **BLACK:** malignant melanoma; **CARBON BLACK:** anthracosis of the lungs; **YELLOW:** pancreas, liver, kidneys, infections, and tumors; **YELLOW ORANGE:** carotenoids from foods.

**Predisposing Criteria:** Cause of death, surgical procedures, disease processes, chemotherapy, delayed embalming, refrigeration, drug addiction, drug therapy, trauma and antibiotics.

**The Sense of Smell:** **ACETONE:** diabetic coma and cancers; **RAW LIVER:** hepatic coma; **AMMONIA:** uremic conditions; **FOUL-ROTTED:** gangrenous; **ALMONDS:** cyanide; **ONIONS:** phosphorus; **GARLIC:** arsenic; **HYDROGEN SULFIDE:** decomposition.

Under current laws, rules and regulations, funeral service practitioners are not given the necessary information to protect themselves. The responsibility is that of the practitioner within the workplace. Just having proper work attire isn't enough. We should be concerned with methods of sterilization and sanitation. Having only limited information as to the cause of death, medications, or specialized treatments prior to death, the practitioner/embalmer must resort to a practical approach without losing sight that no two bodies are the same. Just treat every remains as a potential hazardous condition. This is, of course, the best rule of thumb possible.





## PRIMARY BLOOD VESSELS FOR VASCULAR INJECTION

**Right Common Carotid Artery:** The most common artery used in embalming. This vessel has a large accompanying vein (Internal Jugular). The artery follows the course of the trachea and esophagus. The carotid sheath contains the Common Carotid Artery, the Internal Jugular Vein, and the Vagus Nerve (Pneumogastric Nerve or 10th Cranial Nerve).

**Common Carotid Artery:** The imaginary guideline for the Right Common Carotid Artery is from the sternoclavicular articulation, to the angle of the jaw, ear lobe or the mastoid process (behind the ear). The incisions vary as to the practitioner.

**The Medial Supraclavicular:** Between the clavicular and sternal attachment of the sternoclavicular muscle. The incision is approximately 1-inch in length with the clavicle (collar-bone) used as a support for cutting. The tissue is pulled slightly upward prior to making the incision. Blunt dissection exposes the carotid sheath containing the necessary vessels for injection and drainage. Some practitioners lift the whole sheath, separate the vessels and place two ligatures on each vessel (superior and inferior) using straight forceps, the aneurism hook (needle) or a thread passer. Care must be taken not to twist the vessels. Other practitioners pick up the vein first and others the artery first. The technique is optional. All prepare the vessels for the insertion of the necessary tubes.

## INSERTION OF TUBES

Two arterial tubes are inserted into the Right Common Carotid, one upward (superior) and one downward (inferior) for control and convenience. For maximum control it is recommended that a drain tube be inserted into the Internal Jugular. This allows for the practitioner to control intervascular pressure and distribution. The addition of a plastic hose to the drain tube to the point of drainage provides a system of control for drainage and a method of environmental control for the practitioner/embalmer. The insertion of the drain tube may be difficult. If the vessel is twisted, a pair of angular forceps may be used to prepare the way for the arterial tube. The rule of thumb is to use the largest drain tube possible. If resistance occurs, use a smaller size. If there is still resistance, gently lift the right shoulder when inserting the drain tube changing the direction in a circular motion.

The supraclavicular incision is made at the middle third of the clavicle. The vessels are located toward the midline, hugging the trachea. Anatomically the trachea lies anterior to the esophagus. The trachea is made up of C shaped concentric rings of cartilage, which can easily be identified by digital touch. Some practitioners may pick up the Left Common Carotid from the incision made on the right side by dissecting the tissue above the trachea, or between the esophagus and the trachea. After the embalming process, some practitioners may make an incision between the concentric cartilage of the trachea and pack the trachea superiorly and inferiorly with cotton saturated with Mouth Fix or use MF (Multipurpose Filler) to control purge (liquid or gas).

## Additional Injection Sights for the Common Carotid Arteries

The parallel incision is made posterior the sternocleidomastoideus. Restricted cervical, both Common Carotid Arteries are used for specific procedures. Half moon, a crescent incision from the center of one clavicle to the center of the other clavicle. Transverse incision is from the center of one clavicle, to the center of the other clavicle. Flap





incision, is an incision made under the breast from one axillary space to the other axillary space. Commonly used doing a restricted thoracic autopsy.

**Axillosubclavicular** or infraclavicular incision is made in the lateral infraclavicular fossa. The arterial tube is inserted into the Axillary Artery directly into the Subclavian Artery. Usually the femoral vein is used as the drainage point, but the drainage point is the option of practitioner.

**Axillary Artery:** An imaginary guideline for the Axillary Artery is from the infra clavicular fossa (outer border of the first rib) to the beginning of the bicipital groove (teres major muscle). The incision is made along the anterior margin of the hairline.

**Brachial Artery:** An imaginary guideline for the Brachial Artery is the bicipital groove. The incision is made between the bicep and tricep muscles. This has become a preferred injection point, allowing for natural positioning of the arms and hands. Drainage point would be the option of the practitioner.

**Femoral Artery:** An imaginary guideline for the Femoral Artery, is from the middle third, center (a point midway between the iliac spine or crest, and the symphysis pubis) of poupart's (inguinal ligament), to the inner prominence of the knee joint (medial epicondyle). The upper third is Scarpa's triangle or femoral trigone. To locate the Femoral Artery, the practitioner may place his/her thumb on the superior crest of the ilium and the little finger on the crest of the pubic bone. The index finger points toward the middle of the knee and will indicate the position where the femoral incision should be made.

## SECONDARY VESSELS FOR VASCULAR INJECTION

**Facial Artery:** An imaginary guideline for the Facial Artery is from the inferior border of the angle of the mandible, anteriorly along the inferior border of the body of the mandible just beyond the inferior mandibular notch. The distance is determined by digital pressure. The incision is made between the anterior and posterior borders of the notch (1/4 of an inch). (Used when an obstruction may be preventing facial distribution of the embalming chemical or when the organs of the neck and throat have been removed during an autopsy.)

**Ulnar and Radial Arteries:** An imaginary guideline for the Ulnar and Radial Arteries is an extension of the axillobrachial guideline, passing through the center of the anti cubital fossa, where the brachial bifurcates into the Radial and Ulnar Arteries. The anti cubital is located 2/3 of an inch below the bend of the elbow (forearm). The incision may be made vertical or transverse through the center of the anti cubital space. At this point using the terminal section of the brachial, both the radial and ulnar may be injected at the same time. From this same point the practitioner can inject either the Ulnar or the Radial Arteries.

**Ulnar Artery:** An imaginary guideline for the Ulnar Artery is 2/3 of an inch below the bend of the elbow (anti cubital fossa) on the anterior surface of the forearm just above the annular ligament (wrist), above the little finger. The incision is made between the tendons of the flexor carpi ulnaris, and the flexor digitorum sublimis, which may be defined by digital pressure.

**Radial:** An imaginary guideline for the Radial Artery is 2/3 of an inch below the bend of the elbow (anti cubital fossa) on the anterior surface of the forearm just above the annular ligament (wrist), above the center of the ball of the thumb (thenar eminence). The incision is made between the flexor carpi radialis and the





# Applied Embalming

supinator longus muscle. Laterally to the tendon of the flexor (carpi-radialis).

**External Iliac Artery:** An imaginary guideline for the External Iliac Artery, begins at a point about 1/2 of an inch to the left of the umbilicus to a point in the middle third of the inguinal ligament. The superior portion represents a guideline for the Common Iliac Artery, which is important in embalming the autopsied body. The lower portion represents the guideline for the External Iliac Artery, 1-inch above the middle third (center) of the inguinal ligament (poupart's ligament). The incision is made along this guideline where the External Iliac is most superficial.

**Popliteal Artery:** An imaginary guideline for the Popliteal Artery is through the center of the popliteal space posterior to the bend of the knee. The incision is made along the medial side at the bend of the knee to avoid the large number of muscle attachments in that region.

**Posterior Tibial Artery:** An imaginary guideline for the Posterior Tibial Artery is from the inferior border of the popliteal space, to a point between the medial malleolus (inner ankle) and the calcaneus (heel). The incision is made between the inner ankle and heel.

**Anterior Tibial Artery:** An imaginary guideline for the Anterior Tibial Artery, is from the center of the popliteal space, to a point between medial malleolus (medial ankle joint) and the lateral malleolus (lateral ankle joint) between the big toe, and the next toe. The incision is made high on the instep, 1-1/2 inches below the annular ligament of the ankle, or 2-inches above the annular ligament along the flat lateral side of the tibia.

**Dorsalis Pedis Artery:** An imaginary guideline for the Dorsalis Pedis Artery is from the center of the ankle on the instep to a point between the big toe and the next toe.

## ADDITIONAL LINEAR GUIDELINES FOR THE EMBALMER

**Abdominal Aorta:** An imaginary guideline for the Abdominal Aorta is from a point 1/2 inch below (posterior) and 1/2-inch to the left of the umbilicus in an upward direction for 5 or 6 inches, gradually sloping toward the median line (vertebrae). The Abdominal Aorta terminates at the 3rd and 4th vertebrae where it bifurcates into the right and left Common Iliacs. Can be used as a site for infant embalming.

**Common Iliac and External Iliac:** An imaginary guideline for the Common Iliac and External Iliac, is from 1/2-inch below and 1/2-inch to the left of the umbilicus to a point 1/2-inch medial to the middle of the right or left inguinal ligaments. The upper halves of these linear guidelines will represent the linear guidelines for the Common Iliac Arteries, and the lower halves of the linear guideline will represent the linear guidelines for the External Iliacs.

**Common Iliac and the Internal Iliac:** An imaginary guideline for the Common Iliac and Internal Iliac, is from 1/2-inch below and 1/2-inch to the left of the umbilicus to a point 1-1/2 to 2-inches to the bifurcation of the External and Internal Iliacs (hypogastric). (Which sends numerous branches to the buttocks, pelvic walls, pelvic viscera and the external genitalia.) A common problem is if the Internal Iliac is nicked or cut during a post mortem examination.

**Internal Carotid/Middle Cerebral:** Located on both sides of the sella turcica on the floor of the cranial vault. To expose the Internal Carotid/Middle Cerebral the sella turcica must be chipped away opening the sphenoidal sinuses providing necessary length of vessels to secure arterial tubes. Reverse injection will provide distribution to the inner eye and inner ear. For proper distribution, the most inferior portion of the Internal Carotid must be tied off.





## **GUIDELINES FOR VEINS USED FOR DRAINAGE OR INJECTION**

**Internal Jugular Veins:** An imaginary guideline for the Internal Jugular Veins is from the sternoclavicular articulation to the ear lobes, angles of the mandible, or the mastoid processes of the temporal bones. The Internal Jugular Veins lie lateral and superficial to the Common Carotid Arteries.

**Brachiocephalic or Innominate Veins:** An imaginary guideline for the Brachiocephalic or Innominate Veins is from a point just posterior to the sternoclavicular articulation, and posterior to the right margin of the sternum at the first intercostal space. Improper positioning of the neck obstructs the flow of blood through these veins during the embalming process, creating discoloration in the face and/or frogging of the neck.

**Superior Vena Cava:** An imaginary guideline for the Superior Vena Cava is from a point just posterior to the sternum in the first intercostal space, to a point to the right margin of the sternum at the third intercostal space. This enters in the formation of the right atrium of the heart. This is the site of importance to the practitioner who must retrieve blood samples from tissue donors.

**Axillary Vein:** An imaginary guideline for the Axillary Vein is a point at the middle of the lateral boundary of the base of the axillary space, to a point at the center of the axillary space (hairline). A continuation of the Brachial/Basilic Vein, which terminates at the outer border of the first rib.

**Brachial/Basilic Vein:** An imaginary guideline for the Brachial/Basilic Vein is along bicipital groove between the bicep and tricep muscles. The vein lies above the brachial artery, and provides a visual landmark for the artery.

**Inferior Vena Cava:** An imaginary guideline for the Inferior Vena Cava is a point 1 inch inferior to the umbilicus and right of the vertebral column, and extends inferiorly 6 to 8 inches sloping laterally from the midline approximately 1 inch. The Inferior Vena Cava bifurcates at the 3rd and 4th lumbar vertebrae. To be correct, the origin of the Inferior Vena Cava is the union of the Right and Left Common Iliac Veins at the 3rd or 4th lumbar vertebrae. (The venous system begins at the most distal points and flows toward the heart.)

**Common Iliac and External Iliac Veins:** An imaginary guideline of the Common Iliac and External Iliac, is from a point 1/2-inch medial to the middle third of the inguinal ligament (poupart's ligament), to a point 1-inch below the umbilicus and slightly to the right of the vertebrae column. The lower half of these guidelines represents the External Iliac Veins, and the upper half represents the Common Iliac Veins.

**Femoral Veins:** An imaginary guideline of the Femoral Veins is from the medial epicondyle of the femur (knee joint) to a point 1/2-inch medial to the middle third of the inguinal ligament (poupart's ligament). The upper 2/3 represents the Femoral Vein.

## **CHEMISTRY OF EMBALMING**

To understand the interaction between body chemistry and the use of specially formulated chemicals used in the process of embalming, one must understand basic combinations of inorganic and organic chemistry as they relate to disinfection and preservation.

**Inorganic:** Deals with inanimate or lifeless matter; the study of all the elementary substances.

**Organic:** Considers matter of which living things are composed or which is associated with life forms; the study of the compounds of carbon.





# Applied Embalming

## THE THREE TYPES OF EMBALMING FLUIDS

**Pre-Injections and Capillary Washes:** True pre-injection fluids have no formaldehyde preservatives and have a triple base

**Arterial Fluids:** Firming or Hard, Medium or Semi-Firm, Low firming, and Cosmetic

**Cavity Fluid:** Regular fuming, Low fume, Odorless, and Non-Irritant

## SUPPLEMENTAL FLUIDS

**Co-Injection:** Edema Pro (an Edema reducer), Humectants, Water conditioner Sofner and Anti-Coagulant Cosmetic dyes and Stains

**Special Purpose Fluids:** Jaundice, Extra firming, Edema fluids

**Accessory Embalming Agents:** Hardening compounds, Pulverized, and BTU (granular low to no dust)

**Embalming Powders:** San-Veino, Positive powder, Quad and Hexaphene powder

**Surface Sprays:** Nu-It, San-Veino and CSD in spray form

**Gels:** Cadisol, Nu-Leco and San-Veino, or Hexaphene MA-22 and For-Jey

**Creams:** External Moisturizing Cream, Soft Skin and Emollient Cream

**Bleaches:** Cadisol, Hexyethylphenoform and Bruise Bleach

**Deodorizer:** R.G.S., Odeo and Nu-It

## SPECIAL APPLICATIONS CHEMICALS

**Sealing Compounds:** Leakproof Skin, M-F and Sealit

**Drying Compounds:** Cadisol and Sealit

**Tissue Builders:** Tissue Filler regular (BB-58), Tissue Filler firming, Tissue Filler water soluble

**Adhesives:** Aron Alpha and Leakproof Skin

**Water Conditioners:** Sofner

**Drug and Stain Neutralizer:** Drug and Stain Remover

**Drainage and Pre-Injection Fluids:** Pre-injection chemicals and Capillary Washes are designed to prepare the vascular system for arterial preservative. Increased penetrative power of preservative solution prevents clotting, dilutes blood and offsets astringent and dehydrating properties of the preservative solution. Used prior to arterial preservative chemicals lubricates and dilates blood vessels, may be neutral or alkaline in composition, a neutralizer of acidic conditions. Reduces rigor mortis rigidity, builds up moisture content, insures uniform distribution of preservative chemical and improves cosmetic effect.





# Applied Embalming

**Pre-Injection Fluids:** Pro Line Primer, Epic Pre-Injection & Drainage, Calsec Pre-Injection & Drainage. Contains triple base preservatives non-Formaldehyde, non-coagulative to blood, non-astringent to capillary network, removes calcium, dilutes blood, does not effect fragmented hemoglobin, fragments blood clots and sludge. Can be used as co-injection, neutralizes drugs and other therapeutic chemicals, and does not create waterlogging.

## Arterial Fluid

Concentrations of less than 1% do not gel proteins

Concentrations of less than 1% non bacteriacidal

Concentrations of more than 1% gels then fixes proteins

Concentrations of more than 1% bacteriacidal

Prevents autolysis from bodies own enzymes, fixes muscle tissue preventing sagging and/or distortion, allows for creation of natural appearance, permits leisurely disposal of body under adverse conditions, provides for transfer or shipping cases, provides for viewing.

## Types of Arterial Fluids

The old standards of formulated chemistry vary in description.

**Firming or Hard:** High in formaldehyde content, 25 to 35 index. Has some buffers, definite degree of firmness.

Quite dehydrating, definite degree of firmness used more for problem cases.

**Medium, Semi-Firm or Cosmetic:** Formaldehyde content, 17 to 25 Index. Moderate fixation, rubbery firmness, little dehydration.

**Low-Firming:** Formaldehyde content 3 to 10 Index. Used for special cases (infants & children), minimum rigidity or fixation.

## Cavity fluid

**Regular:** about 25 to 35 index. High odor

**Mild odor:** about 20 to 25 index. Medium odor some odor masking agents

**Low odor:** about 8 to 12 index. Has secondary quick acting preservative chemical.

These cavity chemicals have as above-stated formaldehyde content, or formaldehyde potential compounds, strong fixing agent, strong germicidal agent. Should not be used safely as an arterial chemical. Fumeless, formaldehyde potential compounds, odor suppressing agents, odor masking perfumes, and amounts of alcohol, and phenols.

**Formaldehyde:** the primary preservative of most embalming fluids and may be bactericidal due to its chemical nature to inactivate protein. Triple-based arterial fluids provide additional preservatives for complete interaction with variable body tissues. Formaldehyde HCHO is a colorless gas with a pungent and irritating odor. Soluble in water, Formaldehyde is used in the gaseous form as a germicide and disinfectant and in water solution (formalin) as a preservative and germicide.

**Formalin:** A saturated aqueous solution of HCHO, 40% of a mixture is HCHO gas, 60% of a mixture is water and other solvents, 40% HCHO gas in 60% water = 100% formalin, 30% HCHO gas in 70% water = 75% formalin, 20% HCHO gas in 80% water = 50% formalin, 10% HCHO gas in 90% water = 25% formalin.

When formalin was first introduced in its raw form as a body preservative (see history of ESCO), the major





# Applied Embalming

problem was the “walling-off” effect and graying action. As chemical formulation developed, a new industry developed out of need, an industry based on the scientific method, which became the foundation of the art and science of embalming. Early practitioners searched for a method to recreate the dead human body to what they called a “life-like” form. Today we seek to create a natural, restful memory picture.

## **Notes of general concern**

Death brings about natural acidity to tissue and acidity has a tendency to cause cells/tissues to absorb moisture. Acidity is what causes degrees of rigidity (rigor mortis). Formalin is a dehydrating agent, vapor phase causes fixation. Less than 1% dilution causes gelling, fixes protoplasm (bio chemical of cell), shrinks colloidal mesh, reacts to accessory buffer chemicals to control formalin reactions. Formulated formalin creates rubbery firmness. Formalin is not fungicidal or an insecticide. Formalin action increases with heat and decreases with cold. Formalin has a strong affinity for water. Formaldehyde take-up is the rate proteins absorb and react to HCHO. A 10% concentration of HCHO diffuses into the tissues faster than it hardens the protein. Beyond a 10% dilution, hardening is faster than the diffusion process. Hardening of cross-linked tissue creates the “walling-off” effect. Surface embalming may be apparent but depth preservation is lacking. Subjects tissue softening during decomposition from inadequate chemical preservation.

## **Practical application to body**

The rate of take-up is fastest during and soon after injection (rate of HCHO take-up parallels with rate of firmness), and decreases continually in 12 to 24 hours. The rate is faster at first because of the concentration of HCHO. As HCHO content moves into the tissues, concentration decreases. As concentration decreases, take-up rate decreases. Take-up depends on tissue disorganization of structures. Cold storage increases HCHO demand since rigor mortis has a profound effect on HCHO demand. Breaking rigor mortis increases demand. Bending, flexing, rotating and massaging increases HCHO demand. Use of Pre-injection fluid neutralizes acidity of rigor mortis. The greatest HCHO demand is from viscera, muscle, skin and arterial walls.

## **Additional general components of Arterial chemicals**

Preservatives, modifying agents/buffers, germicides, penetrating agents, blood solvents, anti-coagulants, sequestering agents, coloring agents, perfuming agents, solvent or vehicles, humectants, and also a modifying agent. Each component is broken down into a series of ingredients that, when carefully formulated and combined, create modern embalming chemistry. Combinations of specific ingredients for the many specialized chemicals are available to the practitioner. All ESCO Arterial injection formulations are formulated to be compatible when used in combination for special effects. Preparation of the vascular system is essential to achieving the best results. Continuous research and thorough field testing of every ESCO chemical formulation is assurance to quality control.

The following dilution chart represents dilution factors for Arterial fluids. To develop the following chart, the index of the concentrated Arterial fluid, is divided into 128 ounces, which is the amount of ounces in a gallon of solution:

- 20 (index) divided into 128 ounces = 6.4 ounces, therefore 6.4 = a 1% dilution factor
- 121.6 ounces of water, plus the 6.4 ounces of Arterial fluid = 128 ounces or a 1% solution
- 116.2 ounces of water, plus 12.8 ounces of Arterial fluid = 128 ounces or a 2% solution





# Applied Embalming

- 108.8 ounces of water, plus 19.2 ounces of Arterial fluid = 128 ounces or a 3% solution
- 102.4 ounces of water, plus 25.6 ounces of Arterial fluid = 128 ounces or a 4% solution
- 96.0 ounces of water, plus 32.0 ounces of Arterial fluid = 128 ounces or a 5% solution

## DILUTION CHART

Index			1%	2%	3%	4%	5%	6%	7%	8%	9%
36	.9	1.8	3.5	7.0	10.5	14.0	17.5	21.0	24.5	28.0	31.5
35	.9	1.8	3.6	7.2	10.8	14.4	18.0	21.6	25.2	28.8	32.4
32	1.0	2.0	4.0	8.0	12.0	16.0	20.0	24.0	28.0	32.0	36.0
31	1.0	2.0	4.1	8.2	12.6	16.4	20.5	24.6	28.7	32.8	36.9
28	1.1	2.3	4.5	9.0	13.5	18.0	22.5	27.0	31.5	36.0	40.5
25	1.2	2.5	5.1	10.2	15.3	20.4	25.5	30.6	35.7	40.8	45.9
24	1.3	2.6	5.3	10.6	15.9	21.2	26.5	31.8	37.1	43.4	48.7
23	1.3	2.7	5.5	11.0	16.5	22.0	27.5	33.0	38.5	44.0	49.5
22	1.4	2.9	5.8	11.6	17.4	22.2	29.0	34.8	40.6	46.4	52.2
21	1.5	3.0	6.0	12.0	18.0	24.0	30.0	36.0	42.0	48.0	54.0
20	1.6	3.2	6.4	12.8	19.2	25.6	32.0	38.4	44.8	51.2	57.6
18	1.7	3.5	7.1	14.2	21.3	28.4	35.5	42.6	49.7	56.8	63.9
17	1.8	3.7	7.5	15.0	22.5	30.0	37.5	45.0	52.5	60.0	67.5

There is a difference in today's embalming chemical formulations due to the combination of various components not used at the time formaldehyde was introduced as an embalming fluid (see ESCO history). The early preservative formulation was 40% HCHO and 60% water.

Research indicates that the concept of 1 gallon of embalming fluid per 50 pounds of body weight was the base standard. This fluid was astringent, and required that eye and mouth closures be accomplished by suturing. The use of theatrical oil cosmetics came into popular use to cover up formaldehyde gray reaction and excessive dehydration.

Index	1/4%	1/2%	1%	2%	3%	4%	5%	6%	7%	8%	9%
40	.8	1.6	3.2	6.4	9.6	12.8	16.0	19.2	22.4	25.6	28.8

## DILUTION FACTOR of 100% HCHO Solution

40% HCHO plus 60% H<sub>2</sub>O = 100% Formalin

16 oz HCHO + 112 oz H<sub>2</sub>O = 5% Dilution Walling off Graying Drying

32 oz HCHO + 96 oz H<sub>2</sub>O = 10% Dilution Walling off Graying Dehydration

48 oz HCHO + 80 oz H<sub>2</sub>O = 15% Dilution Walling off Graying Dehydration

64 oz HCHO + 64 oz H<sub>2</sub>O = 20% Dilution Walling off Graying Dehydration +

80 oz HCHO + 48 oz H<sub>2</sub>O = 25% Dilution Walling off Graying Dehydration +

96 oz HCHO + 32 oz H<sub>2</sub>O = 30% Dilution Walling off Graying Dehydration +

107 oz HCHO + 21 oz H<sub>2</sub>O = 35% Dilution Walling off Graying Dehydration +

128 oz HCHO + 0 oz H<sub>2</sub>O = 40% Dilution Walling off Graying Dehydration ++





# Applied Embalming

When non-modified, formalin acts alone on proteins that make up the body, and a condensation or fixation (syneresis) reaction occurs. Hardening results almost immediately, creating a hardening or “walling-off” and a hardened layer of tissue on surface areas and encapsulated organs. The condensation creates a combined shrinking, fixation and drying reaction. This makes tissue resistant to distribution and diffusion, and inhibited to the concentrated formalin solution. High concentrations of formalin are acidic and highly reactive, and tend to produce an unnatural appearance of the body.

As professional individuals, we must understand that the use of quality and properly formulated chemistry is our best insurance against embalming failure. A common sense approach to the art and science of embalming is a must for the future. One ounce of 100% formaldehyde will combine with approximately 37 pounds of receptive body tissue. The average 16 ounce bottle of a 36 index fluid contains 6 ounces of 100% Formaldehyde, meaning it could in actuality interact with 222 pounds of receptive tissue if retained within a body. Under current continuous injection and drainage methodology, most enters the sewers.

## **Major concerns for preservation failure:**

1. Lackadaisical attitudes and approach to the process of embalming with too little time devoted to actual art and science of embalming
2. No preparation of the vascular system prior to preservation treatment
3. Too strong of a formulated embalming solution
4. Too weak of a formulated embalming solution
5. Basing preservation on tissue rigidity or firmness
6. Excessive injection speed (rate of flow)
7. Excessive pressure injection
8. Excessive drainage
9. Lack of drainage
10. Inadequate or lack of treatment of viscera
11. Lack of topical preservation treatment
12. Lack of internal packs or hypodermic treatment
13. Reaspiration and reinjection prior to viewing or shipping
14. Irresponsible use of plastics instead of specialized treatments
15. Lack of cognitive training and direct supervision

The following represents a minimum amount of preservative chemical (HCHO) if totally retained in the tissue protein based on a 30% formulation. 470.8 grams of a 30% HCHO solution will combine with 100 pounds of protein. 706.2 grams of a 30% HCHO solution will combine with 150 pounds of protein. Supplementary preservatives will combine with fats, carbohydrates and etc if present.





# Applied Embalming

Protein weight	Proteins grams	Ounces HCHO
25	1,950	8
50	3,900	16
100	7,800	24
150	10,700	40 ( Average Body Weight )
200	15,600	56
250	19,500	72
300	23,400	80

Formulated HCOH in 16 ounce bottles according to INDEX (Guide Number). Inactivation of tissue changes.

## WATER CONDITIONERS

Water conditioners control the PH of the water and blood coagulation.

### Sofner

The necessity of controlling water variables is essential to the use of Arterial fluids in the preservation process. Foreign particles found suspended in the water will create blockages in the capillary network. Visually, the water may appear cloudy. Hardness is expressed in terms of calcium carbonate parts of hardness per million parts of water (ppm). Water hardness may be temporary or permanent in accordance to the geographic location of the funeral establishment, or central embalming facility. A standard water treatment for every gallon of water should be used to get the best embalming results. With the growing environmental contamination of ground water, our concerns center on chemical control. In light of that, and ESCO's continual concern for the environment, each of our salesmen can test an individual establishment's water supply at no charge. Do-it-yourself test kits are also available.

### Sofner Recommendations

Hardness ppm	Minimum Control	
0 to 68	2 oz. per gallon of Arterial fluid	soft
69 to 153	3 oz. per gallon of Arterial fluid	soft
154 to 221	4 oz. per gallon of Arterial fluid	medium
222 to 304	5 oz. per gallon of Arterial fluid	hard
305 to 374	6 oz. per gallon of Arterial fluid	very hard
375 to 442	7 oz. per gallon of Arterial fluid	extremely hard
443 to 527	8 oz. per gallon of Arterial fluid	use a hammer

## Injection Apparatus and Methodology

Methods of creating similar intravascular pressure as created by the heart during life to force preservative chemical throughout the body. Normal heart action pressure at the aorta is approximately 4.5 to 5 pounds pressure. Recommended pressure is between 3 and 12 pounds, just enough to overcome internal resistance. With death, heart action ceases and the blood pressure decreases. Embalming must recreate, as close to possible, the intravascular pressure. The arch of the aorta becomes the center of the embalming process. The major concern to the embalmer





# Applied Embalming

is the thickening of the blood, development of sludge, plugging up portions of the capillary network. To overcome the vascular systems deficiency and natural obstructions it must be rehydrated to establish a pathway for the pre injection preparatory and preservative chemicals. The use of antibiotics prior to death creates an albuminous adhesiveness reaction of the capillary endothelium walls restricting the fluid distribution. Preparatory treatment, pre-injection is highly recommended.

## Pressure Terminology

Pressure being the force to distribute pre injection and preservative chemicals throughout the vascular network, resistance is determined by intravascular and extravascular factors:

**Potential:** The predetermined estimated pressure setting based on the opinion of the practitioner on pre-analysis of the body condition. Set with pressure gauge and rate of flow gauge closed.

**Actual:** The initial reading indicated on the pressure gauge at the time of opening the rate of flow. Indicator needle will drop lower than the predetermined estimated reading.

**Differential:** Indicates the difference between the potential and actual pressure. Indicating the degree of vascular and extravascular resistance.

**Rate of Flow:** Amount of embalming solution injected over a specific time period. As determined through pre- analysis of overall condition of the body, to achieve uniform distribution. High rate of flow can create distension and swelling.

Time (minutes)	Ounces per minute
5	25.6
6	21.3
7	18.2
8	16.0
9	14.2
10	12.8
11	11.6
12	10.5
13	9.8
14	9.1
15	8.5
16	8.0
17	7.5
18	7.1
19	6.7
20	6.4

Early preservative criteria of 1-gallon to 50 pounds of body weight was a rule of thumb based on a 40% formaldehyde to 60% water concentrate of pure formalin (100%). Modern formulations of embalming chemicals do





# Applied Embalming

not meet the same criteria. A modern specially-formulated 30 index Arterial fluid to inactivate a 150 pounds of body would require 56 ounces of concentrate if it was all retained in the tissue (this equals 3.35 bottles of concentrated fluid). Continuous injection and drainage, a common practice today, would not meet the preservation requirements.

## **Preservation based on Index (Hypothetical, with complete chemical retention)**

<b>Index</b>	<b>Body weight</b>	<b>Ounces of fluid</b>	<b>Weight of fixed tissue</b>
0.10	x 25 lb.	2.5	22.5 lb.
0.10	x 50 lb.	5	45 lb.
0.10	x 100 lb.	10	90 lb.
0.10	x 150 lb.	15	135 lb.
0.10	x 200 lb.	20	180 lb.
0.10	x 250 lb.	25	225 lb.
0.10	x 300 lb.	30	270 lb.
0.15	x 25 lb.	3.7	21.3 lb.
0.15	x 50 lb.	7.5	42.5 lb.
0.15	x 100 lb.	15	85 lb.
0.15	x 150 lb.	22.5	127.5 lb.
0.15	x 200 lb.	30.0	170 lb.
0.15	x 250 lb.	37.5	212.5 lb.
0.15	x 300 lb.	45	255 lb.
0.20	x 25 lb.	5	20 lb.
0.20	x 50 lb.	10	40 lb.
0.20	x 100 lb.	20	80 lb.
0.20	x 150 lb.	30	120 lb.
0.20	x 200 lb.	40	160 lb.
0.20	x 250 lb.	50	200 lb.
0.20	x 300 lb.	60	240 lb.
0.25	x 25 lb.	6.2	18.8 lb.
0.25	x 50 lb.	12.5	37.5 lb.
0.25	x 100 lb.	25	75 lb.
0.25	x 150 lb.	37.5	112.5 lb.
0.25	x 200 lb.	50	150 lb.
0.25	x 250 lb.	62.5	187.5 lb.
0.25	x 300 lb.	75	225 lb.
0.30	x 25 lb.	7.5	17.5 lb.
0.30	x 50 lb.	15	35 lb.
0.30	x 100 lb.	30.0	70 lb.
0.30	x 150 lb.	45	105 lb.
0.30	x 200 lb.	60	140 lb.
0.30	x 250 lb.	75	175 lb.





# Applied Embalming

0.30 x 300 lb.

90

210 lb.

It is necessary to prepare the vascular system prior to the injection of the formaldehyde preservative. An Arterial fluid of less than a 1% will gel the protein materials and create a secondary pseudo sludge within the vascular network. Once this occurs, complete distribution, saturation and preservation may be deficient. Once the vascular system is compromised by formaldehyde action there is no way of correcting it except possibly by complete hypodermic treatment. The question may be, "how do we know when preservation is compromised?"

A minimum guideline for the average body after the vascular system has been prepared follows initial dilution due to HCHO demand. 1 hour to 24 hours = 1% dilution, 2 Days = 2% dilution, 3 Days = 3%, 4 Days = 4% dilution, 5 Days = 5% dilution.

The use of quality fluids, time and an understanding of the principles of pre embalming analysis, pre injection, pressure and controlled rate of flow are the best insurance to quality professional workmanship. Using the best quality of fluids and sundries may cost about \$25.00 per body when done properly.

During arterial injection, the superior and inferior mesenteric arteries carry preservative to the walls of the intestines which creates fixation. Materials inside these organs remain untouched and bring about autolytic breakdown if not aspirated and injected with a quality controlled formulated cavity fluid. Then they are reaspirated and reinjected prior to dressing or shipping.

Failure to treat the viscera may lead to liquidification, odor, gas and purge. In the case of evisceration during an autopsy, a product such as NU-LECO or Hexaphene MA-37 should be used. The same care and treatment is necessary prior to returning the organs to the body. The average adult body contains 15 to 25 pounds of viscera. The rule of thumb is to use two bottles (32 ounces) into the cavities, 16 ounces superior and 16 ounces inferior.

## **ANALYTICAL APPROACH TO THE EMBALMING PROCESS**

The ability to observe specific conditions that relate to antemortem and postmortem conditions develops with experience. The three most common embalming complications that are associated with a large variety of pathological conditions are: 1. Discolorations 2. Dehydration 3. Edema.

**Discolorations** are classified according to their cause. Intravascular blood discolorations may be antemortem, or postmortem. This may be removed by arterial injection (with the help of additive chemicals such as Hexyethylphenoform, which has an internal bleaching effect on the tissue) and by venous drainage.

During life a hypostatic condition may develop associated with poor or stagnant circulation in the dependent parts of the body or an organ. This is commonly referred to as hypostasis. The area in severe conditions may take on a bluish-black color or may be internal (sometimes referred to as capillary congestion). Again, use of chemistry such as Hexyethylphenoform or other co-injection fluids can be used.

Carbon monoxide poisoning creates a cherry red complexion within the tissue. If an individual is given methylene blue prior to death, it may react with the formaldehyde creating a blue-green discoloration. Neither can be removed by ordinary arterial injection. ESCO Drug and Stain Remover should be used to clear the discoloration.

Extravascular discolorations are common antemortem conditions. Ecchymosis and Hematomas are associated





# Applied Embalming

with trauma but may be related to a series of organic diseases. Petechia is associated with both organic and microbial diseases. Flushing the vascular system with special pre injection solution Calsec or Sofner, or both combined, will prepare the vascular system for maximum preservation chemicals without setting the discolorations in the tissue. Controlled drainage is essential in building up intravascular pressure. This may be accomplished by using a drain tube. Once intravascular pressure is achieved and drainage is established, the body may be manually massaged using a low suds disinfectant soap to clear postmortem discolorations. In some cases hydro massage of portions of the face may be used. Some discolorations may be reduced by hypodermic injection or compresses using a bleaching agent (such as San Veino, Bruise Bleach, Hexyethylphenoform, or Cadisol). In some cases, cosmetic masking may be necessary.

## How to Remove Common Surface Discolorations

Adhesive tape: use Isopropyl Alcohol; Blood: use soap and cold water; Fingerprint Ink: use Permatex Hand Cleaner; Tobacco stains and Nicotine: use Lemon juice; Gentian Violet: use Acid Alcohol; Hair Dye: use Dry Shampoo; Grease: use Dry Shampoo; Iodine: use Sodium Thisulfate; Methiolate: use Acid Alcohol; Paint: use Turpentine; Silver Nitrate: use Iodine Wash & Sodium Thisulfate; Tar: use Kerosene.

Many discolorations are associated with skin lesions that are traumatic or pathological and change in structure of the integumentum. Unbroken skin with discolorations and scaling associated with exanthematous diseases.

Unnatural deaths and/or storage practices create various changes in appearance and color: Refrigeration, Electrocution, Carbon Monoxide poisoning, Drowning, Poisons, Mutilations, Burns, Hanging, Exsanguination.

Predisposing vascular conditions leading to various discolorations:

Arteriosclerosis	Atheroma	Varices
Clots	Emboli	Phlebitis
Thrombosis	Hemorrhage	Endocarditis
Tuberculosis	Fibrile diseases	Tumors
Freezing	Gangrene	Gunshot
Mutilation	Severances	Corrosive poisons
Asphyxiation	Pneumonia	Burns
Syphilis	Leukemia	Hanging
Shock	Decomposition	

Early unseen signs of decomposition begin in the region of the larynx and trachea. The first external sign is a green area about the size of a dime in the right inguinal region.

Predisposing conditions associated with decomposition:

Hydrocephalus	Edematous bodies	Peritonitis
Burns	Gangrene	Mutilations
Pregnancy	Febrile diseases	Septicemia

## Jaundice

Basically there are six forms of jaundice on the ecterus index. Of these types some are more reactive to oxidation than the others. Jaundice is measured in degrees on a color index. A comparison in intensity of color with that of





# Applied Embalming

potassium-dichromate, normal being in a numeric range of 3 to 5. When an excessive amount of bilirubin is present and jaundice becomes apparent, the index is usually 15 or higher. There are approximately 20 or more types of causes of jaundice. During primary disinfection and scrubbing of the body excessive bilirubin is washed off. To date there is no known way for a practitioner to determine the oxidative process and how it will effect any given body. The oxidative process converts bilirubin yellow into biliverdin green, or verdigrin. Occasionally a body will turn black. Black Jaundice is a symptomatic condition of viral hepatitis. The rule of thumb is to treat any jaundiced body as a potential hazard.

Bilirubin in the vascular system prevents clotting so the practitioner will rarely find clots in a jaundiced body. A common post embalming problem is blistering, due to the practitioners failure to use overly diluted Arterial fluids. Extensive edema in the extremities may be associated with some primary causes symptomatic jaundice. A pre-injection fluid such as Calsec, Pro Primer or Epic Drainage may be used with Sofner as a primary injection solution to flush the vascular network of excessive ammonia and water. Small punctures may be made in the wrist or posterior upper leg, and channeled with a straightened wire and wick. Elevate affected areas to stimulate gravitational force and treat areas with topical cauterants and preservatives. Cadisol, Hexaphene MA-22 and San-Veino Gel are ideal for this purpose. Always use intermittent drainage.

Rubin-X is a two-part buffered concentrate that is a specially formulated jaundice fluid. ***When Rubin-X is used you must follow the directions in every way to obtain the desired effect, which is total bleaching.***

**Dehydration** may be due to physiological, pathological or environmental conditions. It is a major concern to the practitioner in creating a natural appearance. In nature, dehydration is a natural process of preservation. Dehydration can be caused by heat or cold. It is in many cases a predisposing consideration associated with hemorrhage, emaciation, refrigeration, burns, pyrexia, and malaria. AIDS for example may cause fever, dehydration, emaciation, jaundice, and edema, connective tissue tumors and or hemorrhages all in one body. This creates a number of different approaches to the embalming process.

Rehydrate using a triple base preservative pre injection chemical such as Calsec and Sofner. Large volume of fluid, low pressures, and low rate of flow. Room temperature water. Diluted preservative chemicals containing lanolin should be considered and conditioner should be added for molecular retention. If additional preservation should be required, add additional Arterial fluid and moisture retaining chemicals, such as Epic Conditioner, and Celtrol. Skin texture, embrittlement or natural incarnadining effects are found in a low index Arterial fluid such as Peer, Ming, CLAF and Celtrol. ***(The exception to this rule is Drug and Stain Remover, which is not compatible and can not be used with any fluid containing formaldehyde.)*** The use of massage creams, Soft Skin, and other emollients is recommended.

Follow-up using experiential determination of modified fluid and/or humectant-based preservative chemical to restore natural contours, sectional embalming I through 6 points.

**Edema** in its many forms may be a major predisposing consideration in the treatment of bodies especially those where the life support system comes into play. The old term for edema that was used during the 1930s and 1940s was dropsy.

Renal failure	Congestive heart failure	Cirrhosis of the liver
Phlebitis	Trauma	Alcoholism
Burns	Carbon monoxide poisoning	Cancer





# Applied Embalming

Parasites

Lymph vessel obstructions

Drugs

Allergic reactions

Pulmonary

Cytotoxic

## Primary Concerns When Dealing with Edema

A distention of tissues, increased dilution factor, desquamation (skin slip), leakage, capillary and venous congestion, increase in permeability of capillary walls, decrease in osmotic pressure of the blood. Recommended minimal treatment of symptomatic conditions associated with myriad of diseases.

The embalmer-practitioner must blend cognitive knowledge with manipulative skills to meet the challenges of the 21st century. Handle with extreme care as not to separate the epidermis from the dermis creating manipulative desquamation. Use stronger dilutions of a higher index fluid due to the bodies abnormal water content. Leakage pre and post embalming. Distortion of features, and rapid decomposition. The previously identified symptomatic conditions may be associated with many diseases individually or in various numbers. The following may be of major concern in the analytical pre analysis of the dead body prior to embalming:

Dehydration

Emaciation

Edema

Jaundice

Discolorations

Decomposition

Purge

Skin slip

## IN CONCLUSION

Review the ESCO, GOLDCREST embalming chemicals and sundry chemicals which may be used in the preparation of the body. Guidelines for common basic conditions have been addressed as they relate to various specific scenarios. One must remember the fore-mentioned provide a starting point. Basic cognitive schooling, practical experience and continuing education are the necessary foundations for the future.





# Index





# Index

## A

Act Cavity: 41  
Adapters: 54  
Amazing Spray Cleaner: 36  
Aneurism Hook: 49  
Aneurism Hooks, Separators & Directors: 49  
Aneurism Needles: 49  
Angular Scissors: 69  
Angular Vein & Dissector Forceps: 71  
Applied Embalming: 106  
Apron, Disposable Polyethylene : 78  
Aron Alpha: 22  
Arterial Chemicals: 10  
Arterial Tubes: 73  
Arterial Tubes Radial, Luer-Lok & Hairpin: 75  
Artery & Vein Scissors: 68  
Aspirator Extension: 50  
Aspirator Splash Tubing: 72  
Aspirator, Regular Post-mortem : 50  
Aspirators & Accessories: 50  
Casket Displays & Miscellaneous Needs: 98  
Cavity Chemical Injector: 48  
Cavity Chemicals: 16  
CAVREX Index 28: 18  
CELTROL: 20  
Chemical Sundries: 21  
Chrome Pump Barrel Syringe: 65  
CIRCOL Index 20: 12  
Collapsible Church Truck: 95  
COMPO Cavity Index 26: 18  
COMPO Hard Index 28: 15  
COMPO Non-Irritant Index 4: 18  
Cosmetic Fluid Dye – Flesh: 42  
Cotton: 61  
Coveralls: 81  
Crucifixes: 86  
    Exterior Crosses—Slim Line Sealers: 89, 90  
    Interior Crosses—Metal: 88  
    Interior Crosses—Wood: 87  
    Interior/Exterior Crosses—Sealers: 91

## B

Bandage - Latex: 61  
Barber Scissors: 69  
Bex: 43  
Body & Casket Lifters: 95  
Boot Covers: 79  
Bruise Bleach: 22  
Brush Kit: 66  
Brush, Coarse Stippling : 67  
Brushes: 66  
Bulbs: 100

## C

C.L.A.F. Index 22: 14  
Cadisol: 22  
Cadisol Gel: 23  
CALSEC: 8  
Calvarium Clamp: 58

## D

Dental Floss: 64  
Denture Replacers & Mouth Formers: 58  
DEPO (Desiccating Powder): 23  
Directories: 99  
Directories & Mortuary Glasses: 102  
Disaster Pouches: 60  
Disinfectant Soap: 36  
Disposable Scalpels & Blades: 83  
Disposable Sheets & Aprons: 62  
Needle Injector: 55  
Drainage Chemicals: 7  
Drug & Stain Remover: 9  
Dry Shampoo: 24  
Dual-duty Truck: 105  
Dynamic Trocar: 48





# Index

## E

Edema Pro: 24  
Embalming Machines: 46  
EMC (Cream): 24  
Emollient Cream: 25  
EPIC Cavity Index 26: 17  
EPIC Conditioner: 20  
EPIC Drainage: 8  
EPIC Index 18 (Pink/Tan): 11  
EPIC Index 25: 11  
Extension Baby Case: 98  
Extremities Positioner: 59  
Eye Caps, Mouth Plates, Skull Clamps, Tissue Dryer: 58  
Eye Shield & Mask Combo: 82

## F

f-6 insect killer: 37  
Facial Tint: 35  
First Call Cot: 96  
First Call Cover: 105  
First Call Pouch: 105  
Fixation Forceps: 70  
Flesh Tinting Spray: 42  
Flex: 25  
Flo-Dri: 36  
Floral Display Systems: 97  
Fluid Color (Pink): 33  
Fluid Color (Tan): 33  
For-Jey Formalin Jelly: 25  
Forceps: 71  
Forceps, Curved Arterial : 74  
Full-face Splash Shield: 80  
Funeral Procession Aids: 93

## G

Glass Syringe: 65  
Gloves: 77  
Goldcrest Embalming Chemicals: 38

Gown, Coated Front : 79  
Gown, Disposable Polyethylene: 78  
Gown, Polyolfin-coated : 80  
Gravity Injector: 84  
Green 8-handle Heavy Duty Pouch: 60  
Groove Director: 49

## H

Hairpin Arterial Tubes: 75  
Hardening Compound BTU: 26  
Hardening Compound Pulverized: 26  
Hearse Signage: 94  
Hemostat: 70  
Hemostat, Curved : 70  
Hemostats & Forceps: 70  
Hexaphene MA-22: 39  
Hexaphene MA-37: 39  
Hexaphene MA-64: 39  
Hexaphene Powder: 40  
Hexyethylphenofom: 42  
High Pressure Tubing: 72  
Hydraulic Body & Casket Lifter: 96  
Hydraulic Operating Table: 104  
Hydro Aspirator: 50  
Hygienic Soap: 27  
Hypodermic Needles: 65  
Hypodermic Needles & Syringes: 65

## I

Incision Spreader: 84  
Individual Layout Room Identifier: 99  
Infant Tubes: 74  
Injector Needles: 55  
Insight Eye Replacer: 58  
INSTANT Index 35: 14  
Instrument Tray: 84  
IT: 28





# Index

## J

Jugular Super Drain Tubes: 85

## L

L.E.A.F. & L.E.A.F. PLUS Index 20 & 25: 13

Ladder Racks: 97

Leakproof Skin: 28

Letters & Letter sets: 104

Lightweight Casket display rack: 98

LIP Paste: 33

Lip Wax: 27

Liquid Powder: 34

Liquid Spreaders: 67

LITHOL, LITHOL C/R Index 32: 13

Luer-lok Hub Tube: 75

**Lysol Product to come: 24**

## M

M-F (Multi-purpose Filler): 28

Magnetic Base Tubing Holder: 56

Magnetic Casket Spray Holder: 88

Magnetic Funeral Flags: 93

MING Index 18: 12

Mortuary Cots: 96

Mouth Fix: 43

Multi-level, One-man Mortuary Cot: 96

## N

Name Plates, Aluminum : 94

Nasal Tube: 50

Natural Expression Mouth Former: 58

Nearly Invisible Casket Pedestals: 98

Needle Forceps: 70

Needle Injector Handle: 55

Needle Injectors/Trocar Buttons: 56

Non-clogging Post Aspirator: 50

Non-coated Gown: 78

NU-IT: 29

## O

Operating & Dressing Tables: 104

Operating Table, Basic: 104

Operating Table, Folding: 104

Original popular a-racks: 97

Oval Eye Caps: 58

## P

Packing Forceps: 71

Pail 3-Gallon: 56

Pail Liner: 56

Pants: 81

Pen-Lube: 35

Phantom creams: 44

Plastic Separator: 49

Plastic Undergarments: 81

Pointed Scissors: 68

POLAR Index 18/Firmidex 53: 17

Portable Self-folding Traffic guides: 103

Portable Sidewalk Stand Signs: 103

Porti-boy Mark IV: 46

Porti-boy Mark v: 46

Positive Powder: 27

Postmortem Needles: 51

POWER PLAY Index 28: 15, 18

Prep Room Accessories: 56

Prep Room Instruments: 84

Prep Towels: 61

Primer: 8

Protective Wear: 78

## Q

Quad: 26





# Index

## R

Radial Tubes/Slip Hubs: 75  
Radial Tubes/Threaded Hub: 75  
Re-Viva-Tone: 43  
Replacement Ruby Mortuary Glasses: 104  
Restorative Wax: 29  
Rex Index 36: 40  
Rubin-x Jaundice No.1: 41  
Rubin-x Jaundice No.2: 41

## S

San Veino Gel: 30  
San Veino Liquid: 30  
San Veino Powder: 30  
San Veino Spray: 31  
Saniblock: 59  
Scalpels: 82  
Scissors: 68  
Scissors, Curved : 28  
Scissors, Emergency Crash : 69  
Sealit: 31  
Seating Signage: 101  
Self-adhesive Elastic Bandage: 61  
Showroom Truck: 105  
Slaughter Trocars: 48  
Sleeves: 81  
Slick: 32  
Slip Hub - Curved : 73  
Slip Hub - Straight : 73  
Slip Hub Carotid Arterial Tube: 76  
Slip Hub Y w/ Threaded Mounts only: 54  
Slip Hub, Blunt Point: 74  
Slip Hub, Probe Point: 74  
Slip-on Signs: 102  
Sofner: 9  
Soft-Skin: 31  
Solvent & Cleaner: 32  
Special Usage Chemicals: 19  
Specialty Light Bulbs: 100  
Sprayer: 34

Stapler & Scalpel Blade Accessories: 83  
Stock Banners: 93  
Stockings: 81  
Stone Oil: 29  
Stopcock: 53  
Stopcock w/ Luer Loc: 53  
Straight Forceps: 71  
Suction Cup Tubing Holder: 56  
Super Sheet: 62  
Surgeons-style Cap: 79  
Suture & Postmortem Needles: 51  
Suture Needles: 51  
Syringe, Disposable Plastic : 65

## T

Thread Passer: 64  
Thread, Cotton 7-cord : 63  
Threaded Hub Carotid Arterial Tube: 76  
Threaded Hub with Tie Ring: 73  
Threaded Hub without Tie Ring: 73  
Threaded Y Fitting w/ Stopcocks: 53  
Threads & Accessories: 63  
3M Adhesive: 34  
Tinting Brush: 67  
Tissue Dryer Set: 57  
Tissue Filler – Water Soluble Type: 35  
Traffic Cones: 103  
Traffic Control: 103  
Trocarn Button Applicator: 54  
Trocarn Buttons: 54  
Trocarn Cleaning Brush: 48  
Trocarn Points: 47  
Trocarn, Child's : 47  
Trocarns: 48  
Trucks & Roller Systems: 105  
Tubing, Clear Plastic : 72  
Tubing, Latex Amber : 72  
Type D Stands: 97





# Index

## U

Unionalls: 81

Utility Dusting Brush: 68

Utility Scissors: 69

## V

Valve Handle: 47

Vertilizer: 57

## W

Wall-mount Directories: 99

Wax Solvent: 32

Wood-handled Spatulas: 85

## Y

Y Fitting with Stopcocks: 52

Y with Slip Hubs: 52

Y with Slip Hubs/Thread mount: 52

Y with Threaded Mounts & Hub: 52

Ys: 52