



## Tissue-Firm CPF=30<sup>A</sup>

### Special Purpose Arterial Fluid with Entrone and AD-P

Tissue-Firm is a formaldehyde arterial fluid suitable for use in extreme situations requiring thorough preservation and definite firmness of tissues with minimum dehydration effects. Difficult cases such as serious diseases, delayed embalming or advanced decomposition respond well to Tissue-Firm. Special buffers and penetrating agents make it possible to obtain maximum tissue fixation and fluid distribution, with enhanced drainage. Tissue-Firm is not recommended for normal cases.

| PH-A <sup>1</sup>                | DI-SAN <sup>2</sup> | TISSUE-FIRM <sup>B</sup><br>DEFINITE <sup>2</sup><br>FIRMNESS | DI-SAN <sup>4</sup><br>ADD FOR<br>EXTRA FIRMNESS |
|----------------------------------|---------------------|---|--|
| <b>3-4</b>                       | <b>1-2</b>          | <b>9-11</b>   | <b>1-3</b>                                       |
| → → <b>MIX IN THIS ORDER</b> → → |                     |   |  |

#### Notes:

- A - A value assigned to all Champion fluids ranking them on the basis of preservative ability using recommended dilutions in normal cases. The Champion Preservative Factor is not index but can equal it in certain fluids. It is derived from the total chemical composition of each fluid and results of extensive field research. The Champion Preservative Factor can be used by the embalmer to predict the reactivity, preservative value and firming action of Champion fluids.
- B - Add Champion Coloro Dyes as needed to achieve desired cosmetic effect.
- 1 - For proper water conditioning and pH balance to maximize fluid efficiency (if using soft water - reduce amount to 2-3 ozs.)
- 2 - For sanitizing action in solution and improved fluid action in all non-glutaraldehyde based fluids.
- 3 - Embalmer should adjust quantity used according to severity of case and fluid action required. For tissue gas use at maximum rate of 16 oz.
- 4 - For increased aldehyde action with improved preservation and sanitation. In cases of tissue gas use at rate of 8 oz. Di-San per gallon.

**BEFORE USING, READ MATERIAL SAFETY DATA SHEET.  
FOR PROFESSIONAL EMBALMING USE ONLY.**

# MATERIAL SAFETY DATA SHEET

THE CHAMPION COMPANY  
400 Harrison Street  
Springfield, Ohio 45505  
EMERGENCY TELEPHONE NO. (937) 324-5681  
CHEMTREC: (800) 424-9300 (Spill, Leak, Fire, Exposure or Accident)

HAZARD RATING  
Health 2  
Fire 2  
Reactivity 0  
Special 0

## I. PRODUCT INFORMATION

General Type: Embalming Fluid  
Trade Name: Tissue-Firm

## II. HAZARDOUS INGREDIENTS

| <u>MATERIAL (CAS)</u>          | <u>%</u> | <u>OSHA PEL<br/>TWA/STEL (15)</u> | <u>ACGIH TLV<br/>TWA/STEL (15)</u> |
|--------------------------------|----------|-----------------------------------|------------------------------------|
| Formaldehyde (50-00-0)         | 30       | .75ppm/2ppm                       | .3ppm (ceiling)                    |
| Possible Carcinogen: NTP, IARC |          |                                   |                                    |
| Methanol (67-56-1)             | 6        | 200ppm/NONE                       | 200ppm/250ppm                      |

## III. PHYSICAL DATA

|                     |                                       |                     |          |
|---------------------|---------------------------------------|---------------------|----------|
| Boiling Point       | 192° F +                              | Freezing Point      | N/A      |
| Specific Gravity    | 1.088                                 | Vapor Pressure      | UNKNOWN  |
| Vapor Density       | 1                                     | Solubility in Water | COMPLETE |
| Percent Volatiles   | 6                                     | Evaporation Rate    | 1        |
|                     |                                       | (Butyl Acetate = 1) |          |
| Appearance and Odor | Clear, red solution with strong odor. |                     |          |

## IV. FIRE AND EXPLOSION HAZARD DATA

|                                   |   |
|-----------------------------------|---|
| Flash Point                       | 180° F (COC) Combustible Liquid   |
| Flammable Limits In Air           | Lower 6.7 Upper 72  |
| Extinguishing Media               | Foam, Dry Chemical, Carbon Dioxide, Water Spray                           |
| Special Fire Fighting Procedures  | Wear self-contained breathing apparatus, cool container with water spray. |
| Unusual Fire and Explosion Hazard | -----   |

## V. HEALTH HAZARD DATA

|                                    |   |
|------------------------------------|---|
| Threshold Limit Value              | See Part II   |
| Effects of Overexposure            | If swallowed may cause burns, nausea, vomiting, diarrhea, blindness or death. Skin contact may cause burns, dermatitis or serious skin injury. Eye contact may cause burns, inflammation, eye injury or blindness. Inhalation may cause burning of throat and lungs, difficult breathing and collapse, liver damage, nerve damage or blindness. Can be absorbed through skin.                     |
| Emergency and First Aid Procedures | Contact physician immediately. If swallowed give milk or water and induce vomiting by sticking finger down throat and get medical attention. If unconscious - give nothing. If eye or skin contact - flush with water for 15 minutes. Remove contaminated clothing, get medical attention. If inhaled - remove to fresh air, give artificial respiration if not breathing, get medical attention. |

---

---

## VI. REACTIVITY DATA

|                                  |  |
|----------------------------------|--|
| Stability                        | Product is stable  |
| Conditions to Avoid              | Sparks, heat and open flames                                       |
| Incompatibilities                | Strong acids and alkalis   |
| Hazardous Decomposition Products | At high temperatures may release carbon monoxide or carbon dioxide |
| Hazardous Polymerization         | Will not occur   |

---

---

## VII. SPILL OR LEAK PROCEDURES

|                        |   |
|------------------------|---|
| If Material is Spilled | Neutralize with sodium sulfite solution and flush to sewer with large quantity of water - if allowed. Mop up with dry, non-reactive absorbent and dispose of as solid waste as allowed. |
| Waste Disposal Method  | Flush to chemical sewer, incinerate, dispose in sanitary landfill - if allowed or flush to waste treatment system - if allowed.   |

---

---

## VIII. SPECIAL PROTECTION INFORMATION

|                            |   |
|----------------------------|---|
| Respiratory Protection     | Unnecessary if area is adequately ventilated - use organic vapor mask if necessary. |
| Local Ventilation          | Preferred   |
| Mechanical Ventilation     | Acceptable if necessary   |
| Special Ventilation        | Not normally required   |
| Other Ventilation          | Not normally required   |
| Protective Gloves          | Impervious vinyl or rubber type   |
| Eye Protection             | Coverall goggles or full face shield  |
| Other Protective Equipment | Safety shower, eye wash and full protective clothing is required.                   |

---

---

## IX. SPECIAL PRECAUTIONS

Maintain adequate ventilation and engineering controls to insure exposure levels below OSHA limits. Avoid prolonged inhalation or contact with skin or eyes.

Keep bottles tightly capped. Keep away from heat and flames. Store in cool, dry, well-ventilated area.

---

---

The information herein given is in good faith but no warranty, expressed or implied, is made, except that to the best of the Company's knowledge it is accurate. The Champion Company does not assume any legal responsibilities for use or dependence upon same. Customers may wish to conduct tests of their own. The user is urged to read the information provided on the label before using product.

Tissue-Firm

Date July 2004

---

---