



MATERIAL SAFETY DATA SHEET

PREPARED - APRIL 2013

I. Product Identification

Product Name: **KELFIRM 30 ID#51217**
 Proper Shipping Name: **Consumer Commodity, ORM-D**
 Product Use: **ARTERIAL EMBALMING FLUID**
 Chemical Family: **EMBALMING CHEMICAL (MIXTURE)**
 Whmis Classification: **B2, D1A D2B**
 TDG Hazard Class: **Flammable Liquid, Class 3 N.O.S.: 3 UN1993 PKG. III (Methanol, Formaldehyde) Limited Quantity**

II. Hazardous Components

Substance	Case #	Percent	Air Limits	PPM	Nature of Hazard
Formaldehyde	50-00-0	29	TWA (8 hr) TWA (15 min) Action Level (TWA, 8 hr) IDLH Level	.75 ppm 2 ppm 0.5 ppm 100 ppm	Irritant, sensitizer, poison, potential carcinogen
Methanol (methyl alcohol)	67-56-1	11	TWA (8 hr), skin TWA (15 min)	200 ppm; 260mg/m3 250 ppm; 310mg/m3	Flammable, poison

III. Physical Data

Boiling Point: 190°F-210°F
 Vapor Density: Greater than air
 Solubility in Water: Complete
 Odor: Pungent
 Specific Gravity: Greater than 1
 Appearance: Clear red liquid
 Percent Volatiles: 95%

IV. Fire and Explosive Hazard Data

Flash Point: 134°F
 Flammable Limits: Lower - 7%, Upper - 73% (Formaldehyde)
 Extinguishing Media: Foam, CO2, Water Spray, Dry Chemical
 Fire Fighting Procedure: Spray containers with water to cool them. Stay upwind and avoid smoke or fumes, or use an air supply, goggles and protective clothing.
 Special Fire Hazards: Vapors heavier than air can travel to a source of ignition and flash back. Formaldehyde can oxidize with air and heat to give corrosive formic acid fumes.

V. Reactivity Data

Stability: Stable
 Conditions to Avoid: Heat, sparks or flame.
 Materials to Avoid: May react violently if mixed with phenol, strong acid and alkali or oxidizing agents.
 Storage: Store in a dry place kept above 35°F. Lower temperatures can cause formation and precipitation of paraformaldehyde.

VI. Health Hazard Data

Effects of Overexposure: EYES - Can cause severe irritation or burns.
 SKIN - Can cause severe irritation, hardening or cracking of the skin and allergic dermatitis.
 IF INHALED - Highly irritating; may cause inflammation of nose, throat and lungs.
 IF SWALLOWED - Poisonous. Causes pain, vomiting, etc. Ingested methanol can cause blindness.
 CARCINOGEN - Formaldehyde is listed by NTP and IARC. Repeated and prolonged exposure increases the risk. See the OSHA Formaldehyde Standard, 29 CFR 1910.1200 for additional information including monitoring and medical surveillance. Action Level = 0.5 ppm.
 Emergency/First Aid: EYES - Flush immediately with water. Remove contact lenses; continue flushing at least 15 minutes, occasionally lifting lids, until no evidence of formaldehyde remain.
 SKIN - Remove any contaminated clothing. Wash well with soap and water until no evidence of formaldehyde remains.
 INGESTION - Give the victim two glasses of water and then induce vomiting by inserting two fingers to the back of the throat. Following the vomiting, give water, milk or activated charcoal slurry. Never give anything by mouth to an unconscious person.
 INHALATION - Move the victim to fresh air. In high vapor concentrations any rescuer must wear self-contained breathing apparatus.

VII. Spill or Leak Procedures

Spills or Releases: Have protective gear (Section VIII) available when working with formaldehyde solutions. Move any leaking container to a well ventilated area. In case of a spill, first eliminate sources of ignition. Absorb small amounts on paper or rags and move to hood or remove in a labeled, covered container. Neutralize spill residue with dilute (5%) solution of ammonia, sodium sulfite or sodium bisulfite and remove. Flush area with plenty of water.
 Waste Disposal Method: Comply with federal, state and local regulations for the disposal of chemical waste. If approved, flush down drain. Incinerate solid absorbents.
 RCRA Hazardous Waste Numbers: U 122 for Formaldehyde; U 154 for Methanol.

VIII. Special Protection Information

Eye Protection: Splash goggles are recommended.
 Skin Protection: Wear impervious gloves and a splash apron.
 Respiratory Protection: If possible, arrange ventilation adequate to keep formaldehyde levels below the exposure limits indicated in Section II. For levels above the limits a NIOSH-approved full facepiece negative pressure respirator can provide protection for a limited time. For longer exposure or higher levels use positive pressure or self-contained apparatus.
 IDLH Protection: Levels of 100 ppm or more are immediately dangerous to life and health. Entry into an IDLH atmosphere requires full body protection with self-contained air supply or a positive pressure air line supply.

The information on this Material Safety Data Sheet (MSDS) has been compiled from 29 CFR 1910.1200, supplier MSDS, other technical references and our testing and experience. Users are responsible for determining the suitability of this product and information for their circumstances and for knowing of and complying with all pertinent federal and state regulations.