

ETHICON, INC.
Material Safety Data Sheet

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Issued by: ETHICON, Inc. Route 22, Somerville, NJ 08822
Workplace Safety and Environmental Affairs Dept. (201) 218-2702

SECTION I - IDENTIFICATION OF MATERIALS

Name/Composition: Tubing Fluid TF-24 Trade Name & Synonyms: TF-24, Tubing Fluid
*Tubing Fluid TF-18, **Tubing Fluid TF-25 *TF-18, **TF-25
Chemical Family: Aqueous Alcohol Mixture One Suture Packet Contains 2.5-4 ml
Suture packets for the following ETHICON, INC. products contain Tubing Fluid: Gut,
Dermal Silk, CARGILE Membrane, Fascia Lata and Collagen

SECTION II - SIGNIFICANT COMPONENTS AND CONTAMINANTS

CAS Number	Components	%	Exposure Limits (Reference)
67-63-0	Isopropyl Alcohol (IPA)	86.2 *86.9 **91.8	400 ppm - 8 hr. TWA, PEL (OSHA), TLV (ACGIH) 500 ppm - STEL (ACGIH) Short Term Exposure Limit (15 min. limit)
7732-18-5	Purified Water	12.7 *13.1 **7.6	-
100-37-8	Diethylaminoethanol (DEAE)	0.5	10 ppm - 8 hrs. TWA, PEL (OSHA), TLV (ACGIH) (Skin Absorbable)
532-32-1	Sodium Benzoate	0.5 **0.62	-

SECTION III - PHYSICAL DATA

Appearance and Odor: Clear colorless liquid, odor of Rubbing Alcohol
Boiling Point: 80.4°C Specific Gravity: .83 Odor Threshold: 40-200 ppm
Vapor Press.: 3mm at 20°C Evap. Rate (mm of Mercury): N/A ph: N/A
Vapor Dens.(Air=1): 2.07 Solubility in Water: Miscible, forms a near azeotrope

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flashpoint: 64.4°F Closed Cup Flammability Class: IB Autoignition Temp: N/A
Lower Explosive Limit (LEL): 2.5% - IPA Upper Explosive Limit: 12.0% - IPA
Fire Extinguishing Media: Dry Chemical or Alcohol type foam;
Special Fire Fighting Procedures: Warning! FLAMMABLE LIQUID. Residue in
sufficient quantities can form flammable mixtures at or above 64°F. Use
recommended media - water spray may spread the fire.

SECTION V - HEALTH HAZARD DATA (for IPA)

Toxicity: Generally low order of toxicity. LD₅₀ orally in rats - 5.8g/Kg.

Eyes: On contact, wash immediately with large amounts of water; get medical attention. Vapor concentrations near the TLV may cause mild eye irritation. Direct liquid contact can damage eye tissue.

Skin: If excess liquid gets on skin, flush affected area with water. Should irritation develop, avoid contact and seek medical attention. Prolonged skin contact can cause solvent type dermatitis and/or drying and cracking.

Inhalation: If overcome by vapors, move to fresh air and contact physician. Give artificial respiration if necessary. Excessive inhalation can produce mild irritation of respiratory tract. Levels over the TLV can induce drowsiness, headache, and other signs of central nervous system (CNS) depression.

Oral/Ingestion: Get medical attention immediately. A conscious victim should be made to vomit. Small quantities can cause gastrointestinal pain and nausea; 100 ml can be fatal.

SECTION VI - REACTIVITY DATA

General Reactivity: Stable

Incompatibility (Materials to Avoid): Alkylene oxides, acid anhydrides, halogens, aldehydes, phosphorous trichloride, polymerizable esters, hydrogen with palladium, strong oxidizing agents, ammonia.

Hazardous Decomposition Products: Gases and vapors such as carbon monoxide may be released in a fire involving IPA.

Will Hazardous Polymerization Occur? !___! Will Occur (explain) !X! Will Not

Conditions to Avoid: Extreme heat, sparks, and open flame.

SECTION VII - SPILL PROCEDURES/DISPOSAL REQUIREMENTS

Steps to be taken in case material is released or spilled (Small Spill):

Eliminate ignition sources and stop leak or spill. Contain and absorb with vermiculite, sand, or other suitable absorbant. Extremely small amounts can be absorbed on paper towels and evaporated in safe place, allowing time for vapors to clear completely.

Waste Disposal Methods: Dispose of as an Ignitable Waste, EPA Hazard Code D001, according to Federal RCRA, State and Local Regulations

SECTION VIII - SPECIAL PROTECTION INFORMATION (SPECIFY IN DETAIL)

Eye Protection: Not required in the routine hospital environment.

Respiratory Protection: Not required in the routine hospital environment.

Above the TLV: NIOSH-approved respirator required.

Gloves: If prolonged contact is likely, protective gloves of neoprene, nitrile, PVC or natural rubber are recommended.

Ventilation: Small Quantity Use: Dilution ventilation may maintain exposures below the TLV. Prolonged Use: local mechanical exhaust preferred.

SECTION IX - SPECIAL REQUIREMENTS/PRECAUTIONS

Periodic air sampling is recommended. If IPA exposures exceed 200 ppm, periodic medical surveillance is recommended.