



MATERIAL SAFETY DATA SHEET



SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT: M-Line Rosin Solvent

April 13, 2010

Vishay Measurements Group, Inc.
Post Office Box 27777
Raleigh, NC 27611

919-365-3800

CHEMTREC 1-800-424-9300 (U.S.)
703-527-3887 (Outside U.S.)

NOTE: CHEMTREC numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

SECTION 2: HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

CAS NUMBER	CHEMICAL IDENTITY	%
67-63-0	Isopropyl Alcohol	48.0-50.0
108-88-3	Toluene	45.0-52.0

SECTION 3: HEALTH HAZARD DATA

Routes of Entry:

Inhalation: YES Skin: YES Ingestion: Accidental

Health Hazards (Acute and Chronic): Chronic effects may include kidney and/or liver damage. Repeated or prolonged contact has a defatting action. Exposure to toluene may affect the developing fetus.

Carcinogenicity:

NTP:	Not listed
IARC Monographs:	Not listed
OSHA Regulated:	Not listed

Signs and Symptoms of Exposure:

INHALATION: Inhalation may cause irritation of the upper respiratory tract. Symptoms of overexposure may include fatigue, confusion, headache, dizziness and drowsiness. Peculiar skin sensations (e.g. pins and needles) or numbness may be produced. Very high concentrations may cause unconsciousness and death.

EYE CONTACT: Causes severe eye irritation with redness and pain.

SKIN CONTACT: May cause irritation. Prolonged skin contact may result in dermatitis. May be rapidly absorbed by skin.

INGESTION: Swallowing may cause abdominal spasms and other symptoms that parallel overexposure from inhalation. Aspiration of material into the lungs can cause chemical pneumonitis which may be fatal.

Conditions Generally Aggravated by Exposure: Persons with pre-existing skin disorders or impaired liver or kidney function may be more susceptible to the effects of this substance. Alcoholic beverage consumption can enhance the toxic effects of this substance.

SECTION 4: EMERGENCY AND FIRST AID PROCEDURES

INHALATION: If inhaled, remove victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician immediately.

EYE CONTACT: In case of eye contact, immediately flush with plenty of water for at least 15 minutes while lifting lower and upper eyelids occasionally. Get medical attention immediately.

SKIN CONTACT: In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before re-use. Call a physician immediately.

INGESTION: Aspiration hazard. If swallowed, do NOT induce vomiting. Give large quantities of water. Never give anything by mouth to an unconscious person. Get medical attention immediately. If vomiting occurs, keep head below hips to prevent aspiration into lungs.

SECTION 5: FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): 40°F (4°C) Closed Cup

Flammable limits: LEL: 1.2 UEL: 7.1

Extinguishing Media: Dry chemical, foam or carbon dioxide. Water may be used to flush spills away from exposures and to dilute spills to non-flammable mixtures.

Special Firefighting Procedures: Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece operated in positive pressure mode. Water spray may be used to keep fire-exposed containers cool.

Unusual Fire and Explosion Hazards: Vapors may flow along surface to distant ignition sources and flash back. Closed containers exposed to heat may explode. Contact with strong oxidizers may cause fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Steps to be taken if material is released or spilled: Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material and place in a chemical waste container. Do not use combustible materials such as saw dust. Do not flush to sewer.

SECTION 7: EXPOSURE CONTROLS -- PERSONAL PROTECTION

Respiratory Protection: If the exposure limit is exceeded and engineering controls are not feasible, a half-face organic vapor respirator may be worn for up to ten times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency or supplier.

Ventilation: Use general or local exhaust ventilation to keep employee exposures below the air exposure limits.

Local Exhaust: Generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.

Mechanical: Keep below TLV

Special: N/A

Other: N/A

Protective Gloves: Polyethylene or neoprene gloves are recommended.

Eye Protection: Safety goggles and faceshield are recommended.

Other Protective Clothing or Equipment: Wear impervious clothing to prevent skin contact.

Work / Hygienic Practices: Wash thoroughly after use and before eating, drinking or smoking.

SECTION 8: HANDLING AND STORAGE

Precautions to be taken in handling and storing: Protect against physical damage. Store in a cool, dry, well ventilated location, away from fire hazards. Container should be bonded and grounded for transfers to avoid static sparks.

Other Precautions: Containers may be hazardous when empty since they retain product residue (vapors, liquids).

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point:	180°F (82°C)
Vapor Pressure (mmHg):	36 @ 80°F (30°C)
Vapor Density (Air = 1):	3.0
Specific Gravity (H ₂ O = 1):	0.8
Melting Point:	139°F (95°C)
Evaporation Rate (BuAc = 1):	2.8
Volatile Organic Compounds:	825 g/liter
Solubility in Water:	Partial

Appearance and Odor: Clear colorless liquid; benzene-like odor.

SECTION 10: STABILITY AND REACTIVITY DATA

Stability: Stable under ordinary conditions of use and storage.

Conditions to Avoid: Heat, flame, and other sources of ignition.

Incompatibility (Materials to Avoid): Strong oxidizing agents, aluminum, strong acids, nitric acid, sulfuric acid, halogens, active halogen compounds, chlorine.

Hazardous Decomposition or By-products: Carbon monoxide and carbon dioxide may form when heated to decomposition.

Hazardous Polymerization: Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Isopropyl Alcohol

OSHA PEL:	400 ppm (TWA)
ACGIH TLV:	400 ppm
OTHER:	500 ppm STEL
	LD ₅₀ ORAL (RAT) 5840 mg/kg
	LD ₅₀ INTRAPERITONEAL (MOUSE) 933 mg/kg
	LD ₅₀ ORAL (DOG) 6150 mg/kg
	LD ₅₀ SKIN (RABBIT) 13 g/kg

M-Line Rosin Solvent MSDS (Continued)

Toluene

OSHA PEL: 200 ppm (TWA)
ACGIH TLV: 20 ppm
OTHER: 150 ppm STEL
LD₅₀ ORAL (RAT) 636 mg/kg
LD₅₀ INTRAPERITONEAL (MOUSE) 1.12 mg/kg
LC₅₀ INHALATION (MOUSE) 49 gm/m³/4H
LD₅₀ SKIN (RABBIT) 14100

SECTION 12: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose of in accordance with local, state, and federal regulations.

SECTION 13: TRANSPORTATION INFORMATION

SHIPPING NAME	CLASS	PACKING GROUP	UN NUMBER
Flammable Liquids, N.O.S. (Toluene / Isopropanol) (Isopropyl Alcohol) Flammable Liquid	3	II	1993

SECTION 14: REGULATORY INFORMATION

SECTION 313 SUPPLIER NOTIFICATION:

This product contains a toxic chemical or chemicals (as listed below) subject to the reporting requirements of Section 313 Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR Part 372.

CAS NUMBER	CHEMICAL NAME	% BY WEIGHT
67-63-0	Isopropyl Alcohol	48.0-50.0
108-88-3	Toluene	45.0-52.0

TSCA NOTIFICATION:

All components of this product are listed in the Toxic Substance Control Act Chemical Substance Inventory (TSCA).

SECTION 15: OTHER INFORMATION

To the best of our knowledge, the information provided above meets the requirements of the United States Occupational Safety and Health Act and regulations established under 29 CFR 1910.1200 (g)(2)(c)(1)-(4) for a mixture of hazardous chemicals which has not been tested as a whole. The data provided on this Material Safety Data Sheet is from manufacturers of the original components. Micro-Measurements specifically disclaims any and all form of liability and/or responsibility for the application of this product.