



Material Safety Data Sheet
Permout Mounting Media

MSDS# 40131

Section 1 - Chemical Product and Company Identification

MSDS Name: Permout Mounting Media
Catalog Numbers: S70104, SP15-100, SP15-500
Synonyms: A permanent adhesive for cementing cover glass to microscope slide. Polymer dissolved in toluene.

Company Identification: Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410

For information in the US, call: 201-796-7100
Emergency Number US: 201-796-7100
CHEMTREC Phone Number, US: 800-424-9300

Section 2 - Composition, Information on Ingredients

Risk Phrases: 11 20

CAS#: 108-88-3
Chemical Name: Toluene
%: 55
EINECS#: 203-625-9
Hazard Symbols: F XN

Risk Phrases:

CAS#: 68240-09-5
Chemical Name: Polymer of a-pinene, b-pinene, dipentene, b-phellandrene
%: 45
EINECS#: unlisted
Hazard Symbols:

Text for R-phrases: see Section 16

Hazard Symbols:

XN F



Risk Phrases: 11 38 48/20 63 65 67

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Warning! Flammable liquid and vapor. May cause central nervous system depression. Aspiration hazard if swallowed. Can enter lungs and cause damage. May be absorbed through intact skin. Possible risk of harm to the unborn child. Breathing vapors may cause drowsiness and dizziness. Causes eye, skin, and respiratory tract irritation. Target Organs: Central nervous system, respiratory system, eyes, skin.

Potential Health Effects

Eye: Causes eye irritation. Vapors may cause eye irritation.

Skin: Causes skin irritation. May be absorbed through the skin. Repeated or prolonged exposure may cause drying and cracking of the skin. Not expected to cause an allergic skin reaction.

- Ingestion:** May cause effects similar to those for inhalation exposure. Aspiration of material into the lungs may cause chemical pneumonitis, which may be fatal. May cause central nervous system depression.
- Causes respiratory tract irritation. Inhalation of high concentrations (>200 ppm) of toluene are clearly associated
- Inhalation:** with CNS encephalopathy, headache, depression, lassitude (weakness, exhaustion), impaired coordination, transient memory loss, and impaired reaction time.
- Prolonged or repeated skin contact may cause defatting and dermatitis. Repeated exposure in combination with constant, loud noise can produce hearing loss and dizziness. Chronic hydrocarbon abuse (for example, sniffing glue or light hydrocarbons such as contained in this material) has been associated with irregular heart rhythms and potential cardiac arrest. Toluene abuse has been linked with kidney disease, as evidenced by blood, protein, & pus in the urine, accompanied by elevated serum creatinine, decreased urinary output, & metabolic & renal tubular acidosis. Although kidney toxicity has not been common in cases of occupational toluene exposure, there has been at least one report of renal toxicity following a 40-year occupational toluene exposure. Toluene does not cause the severe injury to the bone marrow that is characteristic of benzene poisoning.
- Chronic:**

Section 4 - First Aid Measures

- Eyes:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid.
- Skin:** In case of contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid if irritation develops and persists. Wash clothing before reuse.
- Ingestion:** Potential for aspiration if swallowed. Get medical aid immediately. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If vomiting occurs naturally, have victim lean forward.
- Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.
- Notes to Physician:** Causes cardiac sensitization to endogenous catecholamines which may lead to cardiac arrhythmias. Do NOT use adrenergic agents such as epinephrine or pseudoepinephrine.

Section 5 - Fire Fighting Measures

- General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Water runoff can cause environmental damage. Dike and collect water used to fight fire. Use water spray to keep fire-exposed containers cool. Water may be ineffective. Material is lighter than water and a fire may be spread by the use of water. Flammable liquid and vapor. Vapors are heavier than air and may travel to a source of ignition and flash back. Vapors can spread along the ground and collect in low or confined areas. This liquid floats on water and may travel to a source of ignition and spread fire. May accumulate static electricity.
- Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or appropriate foam. Solid streams of water may be ineffective and spread material.
- Autoignition Temperature:** 480 deg C (896.00 deg F)
- Flash Point:** 4 deg C (39.20 deg F)
- Explosion Limits: Lower:** 1.2%
- Explosion Limits: Upper:** 7.1%
- NFPA Rating:** health: 2; flammability: 3; instability: 0;

Section 6 - Accidental Release Measures

- General Information:** Use proper personal protective equipment as indicated in Section 8.
- Spills/Leaks:** Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Remove all sources of ignition. Provide ventilation. Use only non-sparking tools and equipment. Control runoff and isolate discharged material for proper disposal. Use water spray to cool and disperse vapors and protect personnel.

Section 7 - Handling and Storage

- Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Ground and bond containers when transferring material. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Use only with

adequate ventilation. Keep away from heat, sparks and flame. Avoid breathing vapor or mist.

Storage: Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Separate from oxidizing materials.

Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Toluene	20 ppm	100 ppm TWA; 375 mg/m3 TWA 500 ppm IDLH	200 ppm TWA; 300 ppm Ceiling
Polymer of a-pinene, b-pinene, dipentene, b-phellandrene	none listed	none listed	none listed

OSHA Vacated PELs: Toluene: 100 ppm TWA; 375 mg/m3 TWA Polymer of a-pinene, b-pinene, dipentene, b-phellandrene: None listed

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits. Ventilation fans and other electrical service must be non-sparking and have an explosion-proof design.

Exposure Limits

Personal Protective Equipment

Eyes: Wear chemical splash goggles.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Color: yellow

Odor: aromatic odor

pH: Not applicable

Vapor Pressure: Not available

Vapor Density: 3.1 (air=1)

Evaporation Rate: Not available

Viscosity: Not available

Boiling Point: 111 deg C (231.80°F)

Freezing/Melting Point: Not available

Decomposition Temperature: Not available

Solubility in water: Insoluble

Specific Gravity/Density: Not available.

Molecular Formula: Mixture

Molecular Weight: 0

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Ignition sources, excess heat, confined spaces.

Incompatibilities with Other Materials: Strong oxidizing agents, nitric acid, sulfuric acid.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide.

Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#: CAS# 108-88-3: XS5250000
CAS# 68240-09-5: None listed

RTECS:

CAS# 108-88-3: Draize test, rabbit, eye: 870 ug Mild;

Draize test, rabbit, eye: 2 mg/24H Severe;

Draize test, rabbit, skin: 435 mg Mild;

Draize test, rabbit, skin: 500 mg Moderate;

Draize test, rabbit, skin: 20 mg/24H Moderate;

Inhalation, mouse: LC50 = 400 ppm/24H;

LD50/LC50: Inhalation, mouse: LC50 = 30000 mg/m3/2H;

Inhalation, mouse: LC50 = 19900 mg/m3/7H;

Inhalation, mouse: LC50 = 10000 mg/m3;

Inhalation, rat: LC50 = 49 gm/m3/4H;

Oral, rat: LD50 = 636 mg/kg;

Skin, rabbit: LD50 = 14100 uL/kg;

RTECS:

CAS# 68240-09-5:

Toluene - IARC: Group 3 (not classifiable)

Carcinogenicity: Polymer of a-pinene, b-pinene, dipentene, b-phellandrene - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Not available

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: TOLUENE SOLUTION

Hazard Class: 3

UN Number: UN1294

Packing Group: II

Canada TDG

Shipping Name: TOLUENE SOLUTION

Hazard Class: 3

UN Number: UN1294

Packing Group: II

USA RQ: CAS# 108-88-3: 1000 lb final RQ; 454 kg final RQ

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN F

Risk Phrases:

R 11 Highly flammable.

R 38 Irritating to skin.

R 48/20 Harmful : danger of serious damage to health by prolonged exposure through inhalation.

R 63 Possible risk of harm to the unborn child.

R 65 Harmful: may cause lung damage if swallowed.

R 67 Vapours may cause drowsiness and dizziness.

Safety Phrases:

S 36/37 Wear suitable protective clothing and gloves.

S 46 If swallowed, seek medical advice immediately and show this container or label.

S 62 If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.

WGK (Water Danger/Protection)

CAS# 108-88-3: 2

CAS# 68240-09-5: Not available

Canada

CAS# 108-88-3 is listed on Canada's DSL List

CAS# 68240-09-5 is listed on Canada's DSL List

Canadian WHMIS Classifications: B2, D2A, D2B

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CAS# 108-88-3 is listed on Canada's Ingredient Disclosure List

CAS# 68240-09-5 is not listed on Canada's Ingredient Disclosure List.

US Federal

TSCA

CAS# 108-88-3 is listed on the TSCA Inventory.

CAS# 68240-09-5 is listed on the TSCA Inventory.

REVIEWED

DATE: June 11/2012
C. Rutherford

Section 16 - Other Information

MSDS Creation Date: 5/20/1999

Revision #15 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.
