

# SAFETY DATA SHEET

Revision Date 14-Apr-2014

Revision Number 1

## 1. Identification

**Product Name** Permunt Mounting Media

**Cat No. :** SP15-100, SP15-500

**Synonyms** A permanent adhesive for cementing cover glass to microscope slide. Polymer dissolved i

**Recommended Use** Laboratory chemicals

**Uses advised against** No Information available

### Details of the supplier of the safety data sheet

<b>Company</b>	<b>Emergency Telephone Number</b>
Fisher Scientific	CHEMTREC®, Inside the USA: 800-
One Reagent Lane	424-9300
Fair Lawn, NJ 07410	CHEMTREC®, Outside the USA: 001-
Tel: (201) 796-7100	703-527-3887

## 2. Hazard(s) Identification

### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids	Category 2
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Reproductive Toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Target Organs - Central nervous system (CNS).	
Specific target organ toxicity - (repeated exposure)	Category 2
Aspiration Toxicity	Category 1

### Label Elements

**Signal Word**  
Danger

**Hazard Statements**  
Highly flammable liquid and vapor

May be fatal if swallowed and enters airways  
Causes skin irritation  
Causes serious eye irritation  
May cause drowsiness or dizziness  
Suspected of damaging the unborn child  
May cause damage to organs through prolonged or repeated exposure

**Precautionary Statements****Prevention**

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Use personal protective equipment as required  
Wash face, hands and any exposed skin thoroughly after handling  
Wear eye/face protection  
Do not breathe dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area  
Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
Keep container tightly closed  
Ground/bond container and receiving equipment  
Use explosion-proof electrical/ventilating/lighting/equipment  
Use only non-sparking tools  
Take precautionary measures against static discharge  
Keep cool

**Response**

IF exposed or concerned: Get medical attention/advice

**Inhalation**

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

**Skin**

If skin irritation occurs: Get medical advice/attention

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

**Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention.

**Ingestion**

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting

**Fire**

In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction

**Storage**

Store locked up

Store in a well-ventilated place. Keep container tightly closed

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Repeated exposure may cause skin dryness or cracking

Harmful to aquatic life

**Unknown Acute Toxicity**

45 % of the mixture consists of ingredients of unknown toxicity.

### 3. Composition / information on ingredients

#### Haz/Non-haz

Component	CAS-No	Weight %
Toluene	108-88-3	55
Polyterpene hydrocarbon resin	68240-09-5	45

### 4. First-aid measures

<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.
<b>Inhalation</b>	Move to fresh air. If breathing is difficult, give oxygen. Obtain medical attention.
<b>Ingestion</b>	Aspiration hazard. Do not induce vomiting. Call a physician or Poison Control Center immediately.
<b>Most important symptoms/effects</b>	Breathing difficulties. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.
<b>Notes to Physician</b>	Treat symptomatically.

### 5. Fire-fighting measures

<b>Suitable Extinguishing Media</b>	Water spray, dry chemical, carbon dioxide (CO <sub>2</sub> ), or foam.. Do not use a solid water stream as it may scatter and spread fire. Cool closed containers exposed to fire with water spray.
<b>Unsuitable Extinguishing Media</b>	Do not use a solid water stream as it may scatter and spread fire
<b>Flash Point</b>	4°C
<b>Method -</b>	No information available
<b>Autoignition Temperature</b>	480°C
<b>Explosion Limits</b>	
<b>Upper</b>	7.1%
<b>Lower</b>	1.2%
<b>Sensitivity to Mechanical Impact</b>	No information available
<b>Sensitivity to Static Discharge</b>	No information available

#### Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition. Runoff to sewer may create fire or explosion hazard. Do not allow run-off from fire fighting to enter drains or water courses. Vapors may travel to source of ignition and flash back. Vapors may accumulate in confined areas (basement, tanks, hopper/tank cars, etc.).

**Hazardous Combustion Products** Carbon oxides.

#### Protective Equipment and Precautions for Firefighters

Vapors are heavier than air and may spread along floors. Vapors may accumulate in confined areas. Thermal decomposition can lead to release of irritating gases and vapors.

#### NFPA

**Health**  
2

**Flammability**  
3

**Instability**  
0

**Physical hazards**  
N/A

## 6. Accidental release measures

### Personal Precautions

Remove all sources of ignition. Take precautionary measures against static discharges. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and inhalation of vapors..

### Environmental Precautions

See Section 12 for additional ecological Information. Prevent product from entering drains.

### Methods for Containment and Clean Up

Remove all sources of ignition. Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. Provide adequate ventilation. Prevent product from entering drains. Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

## 7. Handling and storage

### Handling

Ensure adequate ventilation. Wear personal protective equipment. Keep away from open flames, hot surfaces and sources of ignition. Use spark-proof tools and explosion-proof equipment..

### Storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Flammables area. Keep away from heat and sources of ignition.

## 8. Exposure controls / personal protection

### Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Toluene	TWA: 20 ppm	(Vacated) TWA: 100 ppm (Vacated) TWA: 375 mg/m <sup>3</sup> Ceiling: 300 ppm (Vacated) STEL: 150 ppm (Vacated) STEL: 560 mg/m <sup>3</sup> TWA: 200 ppm	IDLH: 500 ppm TWA: 100 ppm TWA: 375 mg/m <sup>3</sup> STEL: 150 ppm STEL: 560 mg/m <sup>3</sup>

Component	Quebec	Mexico OEL (TWA)	Ontario TWAEV
Toluene	TWA: 50 ppm TWA: 188 mg/m <sup>3</sup> Skin	TWA: 50 ppm TWA: 188 mg/m <sup>3</sup>	TWA: 20 ppm

### Legend

**ACGIH** - American Conference of Governmental Industrial Hygienists

**NIOSH IDLH**: The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health

### Engineering Measures

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

### Personal Protective Equipment

#### Eye/face Protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166

#### Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure

#### Respiratory Protection

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

#### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

## 9. Physical and chemical properties

Physical State	Liquid
Appearance	Yellow
Odor	aromatic
Odor Threshold	No information available.
pH	Not applicable
Melting Point/Range	No data available
Boiling Point/Range	111°C
Flash Point	4°C
Evaporation Rate	No information available.
Flammability (solid,gas)	No information available
Flammability or explosive limits	
Upper	7.1%
Lower	1.2%
Vapor Pressure	No information available.
Vapor Density	3.1 (Air = 1.0)
Relative Density	No information available.
Solubility	Insoluble in water
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	480°C
Decomposition temperature	No information available.
Viscosity	No information available.

## 10. Stability and reactivity

Reactive Hazard	No
Stability	Stable under normal conditions.
Conditions to Avoid	Incompatible products
Incompatible Materials	Strong oxidizing agents
Hazardous Decomposition Products	Carbon oxides
Hazardous Polymerization	Hazardous polymerization does not occur
Hazardous Reactions	None under normal processing

## 11. Toxicological information

### Acute Toxicity

Oral LD50	Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.
Dermal LD50	Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.
Vapor LC50	Based on ATE data, the classification criteria are not met. ATE > 20 mg/l.

### Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Toluene	> 5000 mg/kg ( Rat )	8390 mg/kg ( Rabbit )	26700 ppm ( Rat ) 1 h

Toxicologically Synergistic Products	No information available.
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### Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation	Irritating to eyes and skin
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**Sensitization** No information available.

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Toluene	108-88-3	Not listed	Not listed	Not listed	Not listed	Not listed
Polyterpene hydrocarbon resin	68240-09-5	Not listed	Not listed	Not listed	Not listed	Not listed

**Mutagenic Effects** No information available.

**Reproductive Effects** No information available.

**Developmental Effects** Possible risk of harm to the unborn child.

**Teratogenicity** No information available.

**STOT - single exposure** Central nervous system (CNS).

**STOT - repeated exposure** None known.

**Aspiration hazard** No information available.

**Symptoms / effects, both acute and delayed** Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated.

## 12. Ecological information

### Ecotoxicity

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Toluene	433 mg/L EC50 > 96 h 12.5 mg/L EC50 = 72 h	50-70 mg/L LC50 96 h 5-7 mg/L LC50 96 h 15-19 mg/L LC50 96 h 28 mg/L LC50 96 h 12 mg/L LC50 96 h	EC50 = 19.7 mg/L 30 min	11.5 mg/L EC50 = 48 h 5.46 - 9.83 mg/L EC50 48 h

**Persistence and Degradability** No information available.

**Bioaccumulation/ Accumulation** No information available

**Mobility** No information available

Component	log Pow
Toluene	2.65

## 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification

Component	RCRA - U Series Wastes	RCRA - P Series Wastes
Toluene - 108-88-3	U220	-

## 14. Transport information

### DOT

UN-No UN1294  
 Proper Shipping Name TOLUENE SOLUTION  
 Hazard Class 3  
 Packing Group II

### TDG

UN-No UN1294  
 Proper Shipping Name TOLUENE SOLUTION  
 Hazard Class 3  
 Packing Group II

### IATA

UN-No UN1294  
 Proper Shipping Name TOLUENE SOLUTION  
 Hazard Class 3  
 Packing Group II

### IMDG/IMO

UN-No UN1294  
 Proper Shipping Name TOLUENE SOLUTION  
 Hazard Class 3  
 Packing Group II

## 15. Regulatory information

### International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Toluene	X	X	-	203-625-9	-		X	X	X	X	X
Polyterpene hydrocarbon resin	X	X	-	-	-		X	-	X	X	X

#### Legend:

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

### U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313 Not applicable

Component	CAS-No	Weight %	SARA 313 - Threshold Values %
Toluene	108-88-3	55	1.0

**SARA 311/312 Hazardous Categorization**

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

**Clean Water Act** Not applicable

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Toluene	X	1000 lb	X	X

**Clean Air Act** Not applicable

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Toluene	X		-

**OSHA** Occupational Safety and Health Administration  
Not applicable

**CERCLA**  
Not applicable

Component	Hazardous Substances RQs	CERCLA EHS RQs
Toluene	1000 lb	-

**California Proposition 65** This product does not contain any Proposition 65 chemicals.

Component	CAS-No	California Prop. 65	Prop 65 NSRL
Toluene	108-88-3	Developmental Female Reproductive	-

**State Right-to-Know** Not applicable

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Toluene	X	X	X	X	X

**U.S. Department of Transportation**

Reportable Quantity (RQ):	N
DOT Marine Pollutant	N
DOT Severe Marine Pollutant	N

**U.S. Department of Homeland Security**

This product does not contain any DHS chemicals.

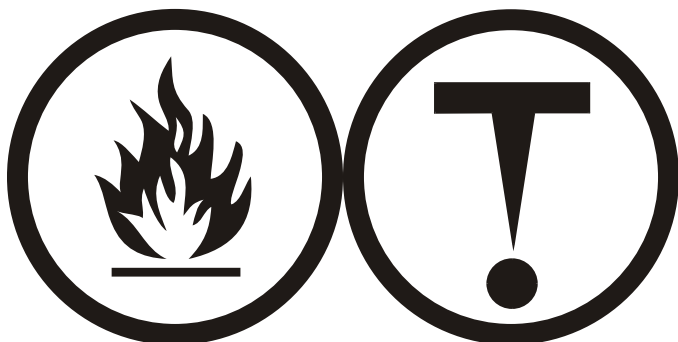
**Other International Regulations****Mexico - Grade** No information available**Canada**

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

**WHMIS Hazard Class**

B2 Flammable liquid
D2B Toxic materials





## 16. Other information

**Prepared By**

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14-Apr-2014

**Print Date**

14-Apr-2014

**Revision Summary**

This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

**Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of SDS**