



# MATERIAL SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Revision Date 08/23/2013

Version 1.2

## SECTION 1. Identification

### Product identifier

Product number 107960  
Product name Entellan® rapid mounting medium for microscopy

### Relevant identified uses of the substance or mixture and uses advised against

Identified uses Use restricted under TSCA to research and development or as analytical reagent. Uses regulated under FDA or FIFRA are not affected.  
In vitro diagnostic reagent, Reagent for analysis

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

Company EMD Millipore Corporation | 290 Concord Road, Billerica, MA 01821, United States of America | SDS Phone Support: +1-978-715-1335 | General Inquiries: +1-978-715-4321 | Monday to Friday, 9:00 AM to 4:00 PM Eastern Time (GMT-5)

Emergency telephone 800-424-9300 CHEMTREC (USA)  
+1-703-527-3887 CHEMTREC (International)  
24 Hours/day; 7 Days/week

## SECTION 2. Hazards identification

### GHS Classification

Flammable liquid, Category 2, H225  
Skin irritation, Category 2, H315  
Reproductive toxicity, Category 2, H361d  
Specific target organ systemic toxicity - single exposure, Category 3, Central nervous system, H336  
Specific target organ systemic toxicity - single exposure, Category 3, H336  
Specific target organ systemic toxicity - repeated exposure, Category 2, H373  
Aspiration hazard, Category 1, H304

For the full text of the H-Statements mentioned in this Section, see Section 16.

### GHS-Labeling

*Hazard pictograms*



*Signal Word*

Danger

# MATERIAL SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number 107960  
Product name Entellan® rapid mounting medium for microscopy

---

Version 1.2

## *Hazard Statements*

H225 Highly flammable liquid and vapor.  
H304 May be fatal if swallowed and enters airways.  
H315 Causes skin irritation.  
H336 May cause drowsiness or dizziness.  
H361d Suspected of damaging the unborn child.  
H373 May cause damage to organs through prolonged or repeated exposure.

## *Precautionary Statements*

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P233 Keep container tightly closed.  
P280 Wear protective gloves/ protective clothing.  
P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  
P308 + P313 IF exposed or concerned: Get medical advice/ attention.

## **OSHA Hazards**

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

## **Other hazards**

None known.

---

## **SECTION 3. Composition/information on ingredients**

Chemical nature Mixture contains:  
Methacrylate/Acrylate resin(s).

### **Hazardous ingredients**

*Chemical Name (Concentration)*

CAS-No.

*toluene (>= 70 % - < 90 % )*

108-88-3

---

## **SECTION 4. First aid measures**

### **Description of first-aid measures**

#### *Inhalation*

After inhalation: fresh air. Consult a physician.

#### *Skin contact*

After skin contact: wash off with plenty of water. Remove contaminated clothing. Consult a physician.

#### *Eye contact*

After eye contact: rinse out with plenty of water. Call in ophthalmologist.

#### *Ingestion*

After swallowing: caution if victim vomits. Risk of aspiration! Keep airways free. Pulmonary failure possible after aspiration of vomit. Call a physician immediately.

Never give anything by mouth to an unconscious person.

---

## MATERIAL SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number 107960  
Product name Entellan® rapid mounting medium for microscopy

---

Version 1.2

### Most important symptoms and effects, both acute and delayed

irritant effects, respiratory paralysis, respiratory arrest, Drowsiness, Dizziness, Unconsciousness, inebriation, Nausea, Vomiting, Circulatory collapse, Headache, Convulsions, drowsiness, CNS disorders, death

Drying-out effect resulting in rough and chapped skin.

### Indication of any immediate medical attention and special treatment needed

No information available.

---

## SECTION 5. Fire-fighting measures

### Extinguishing media

*Suitable extinguishing media*

Carbon dioxide (CO<sub>2</sub>), Foam, Dry powder

*Unsuitable extinguishing media*

For this substance/mixture no limitations of extinguishing agents are given.

### Special hazards arising from the substance or mixture

Combustible.

Vapors are heavier than air and may spread along floors.

Forms explosive mixtures with air at ambient temperatures.

Pay attention to flashback.

Development of hazardous combustion gases or vapors possible in the event of fire.

### Advice for firefighters

*Special protective equipment for fire-fighters*

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

*Further information*

Cool closed containers exposed to fire with water spray. Prevent fire extinguishing water from contaminating surface water or the ground water system.

---

## SECTION 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid substance contact. Do not breathe vapors, aerosols.

Ensure adequate ventilation. Keep away from open flames, hot surfaces and sources of ignition.

Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders: Protective equipment see section 8.

### Environmental precautions

Do not empty into drains. Risk of explosion.

### Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7 and 10).

Take up with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

---

MATERIAL SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number  
Product name

107960  
Entellan® rapid mounting medium for microscopy

Version 1.2

---

**SECTION 7. Handling and storage**

**Precautions for safe handling**

Work under hood. Do not inhale substance/mixture. Avoid generation of vapors/aerosols.

Observe label precautions.

*Advice on protection against fire and explosion*

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

**Conditions for safe storage, including any incompatibilities**

Keep away from heat and sources of ignition. Keep container tightly closed in a dry and well-ventilated place.

Store at +15°C to +25°C (+59°F to +77°F).

---

**SECTION 8. Exposure controls/personal protection**

**Exposure limit(s)**

*Ingredients*

Basis	Value	Threshold limits	Remarks
<i>toluene 108-88-3</i>			
ACGIH	Time Weighted Average (TWA):	20 ppm	
NIOSH/GUIDE	Recommended exposure limit (REL):	100 ppm 375 mg/m <sup>3</sup>	
	Short Term Exposure Limit (STEL):	150 ppm 560 mg/m <sup>3</sup>	
Z1A	Time Weighted Average (TWA):	100 ppm 375 mg/m <sup>3</sup>	
	Short Term Exposure Limit (STEL):	150 ppm 560 mg/m <sup>3</sup>	
OSHA/Z2	Ceiling Limit Value:	300 ppm	
	Time Weighted Average (TWA):	200 ppm	
	Maximum concentration:	500 ppm	Ceiling Limit Value 10 minutes

**Engineering measures**

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

**Individual protection measures**

Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled. The chemical resistance of the protective equipment should be inquired at the respective supplier.

*Hygiene measures*

Immediately change contaminated clothing. Apply skin- protective barrier cream. Wash hands and face after working with substance.

# MATERIAL SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number 107960  
Product name Entellan® rapid mounting medium for microscopy

Version 1.2

### *Eye/face protection*

Safety glasses

### *Hand protection*

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

### *Other protective equipment:*

Flame retardant antistatic protective clothing

### *Respiratory protection*

required when vapors/aerosols are generated.

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

---

## SECTION 9. Physical and chemical properties

Physical state	liquid
Color	colorless
Odor	characteristic
Odor Threshold	No information available.
pH	No information available.
Melting point	No information available.
Boiling point	No information available.
Flash point	46 °F (8 °C)
Evaporation rate	No information available.
Flammability (solid, gas)	No information available.
Lower explosion limit	1.2 %(V) toluene
Upper explosion limit	8 %(V) toluene
Vapor pressure	No information available.
Relative vapor density	No information available.
Relative density	0.93 g/cm <sup>3</sup>
Water solubility	at 68 °F (20 °C) practically insoluble

# MATERIAL SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number	107960	Version 1.2
Product name	Entellan® rapid mounting medium for microscopy	

---

Partition coefficient: n-octanol/water	No information available.
Autoignition temperature	No information available.
Decomposition temperature	No information available.
Viscosity, dynamic	60 - 100 mPa.s at 68 °F (20 °C)
Explosive properties	Not classified as explosive.
Ignition temperature	> 482 °F (> 250 °C)

---

## SECTION 10. Stability and reactivity

### Reactivity

Vapors may form explosive mixture with air.

### Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

### Possibility of hazardous reactions

Risk of explosion with:

fuming sulfuric acid, Nitric acid, silver, perchlorates, nitrogen dioxide, halogen-halogen compounds, uranium hexafluoride, organic nitro compounds, nonmetallic halides, acetic acid

Violent reactions possible with:

Strong oxidizing agents, Strong acids, sulfur

### Conditions to avoid

Warming.

A range from approx. 15 Kelvin below the flash point is to be rated as critical.

### Incompatible materials

rubber, various plastics

### Hazardous decomposition products

no information available

---

## SECTION 11. Toxicological information

### Information on toxicological effects

#### *Likely route of exposure*

Eye contact, Skin contact

#### *Target Organs*

Eyes

Skin

Respiratory system

Central nervous system

Liver

Kidneys

---

MATERIAL SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number 107960  
Product name Entellan® rapid mounting medium for microscopy

Version 1.2

*Acute oral toxicity*

Symptoms: Nausea, Vomiting  
absorption

*Acute inhalation toxicity*

Symptoms: Irritation symptoms in the respiratory tract.  
absorption

*Acute dermal toxicity*

absorption

*Skin irritation*

Mixture causes skin irritation.

After long-term exposure to the chemical:

Dermatitis Drying-out effect resulting in rough and chapped skin.

*Eye irritation*

slight irritation mucosal irritations

*CMR effects*

Teratogenicity:

Suspected of damaging the unborn child.

*Specific target organ systemic toxicity - single exposure*

Mixture may cause drowsiness or dizziness.

*Specific target organ systemic toxicity - repeated exposure*

May cause damage to organs through prolonged or repeated exposure.

*Aspiration hazard*

Aspiration hazard, Aspiration may cause pulmonary edema and pneumonitis.

**Carcinogenicity**

IARC	No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
NTP	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
ACGIH	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

## MATERIAL SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number 107960  
Product name Entellan® rapid mounting medium for microscopy

---

Version 1.2

### Further information

Quantitative data on the toxicity of this product are not available.

Further toxicological data:

Systemic effects:

After absorption of large quantities:

CNS disorders, inebriation, Convulsions, Unconsciousness, Headache, Dizziness, Circulatory collapse, respiratory paralysis, respiratory arrest, death

Further data:

Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

### Ingredients

#### *toluene*

*Acute oral toxicity*

LD50 rat: 636 mg/kg (IUCLID)

*Acute inhalation toxicity*

LC50 rat: 28.1 mg/l; 4 h (IUCLID)

*Acute dermal toxicity*

LD50 rabbit: 12,124 mg/kg (IUCLID)

*Skin irritation*

rabbit

Result: Irritations

OECD Test Guideline 404

*Eye irritation*

rabbit

Result: Eye irritation

OECD Test Guideline 405

(Regulation (EC) No 1272/2008, Annex VI)

*Germ cell mutagenicity*

*Genotoxicity in vitro*

Mutagenicity (mammal cell test): micronucleus.

Result: negative

(IUCLID)

Ames test

Result: negative

(Lit.)

---

## SECTION 12. Ecological information

### Ecotoxicity

No information available.

### Persistence and degradability

No information available.

### Bioaccumulative potential

No information available.

### Mobility in soil

No information available.



# MATERIAL SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number 107960  
Product name Entellan® rapid mounting medium for microscopy

Version 1.2

## *Additional ecological information*

Discharge into the environment must be avoided.

## **Ingredients**

### *toluene*

#### *Toxicity to fish*

LC50 Oncorhynchus mykiss (rainbow trout): 5.8 mg/l; 96 h (ECOTOX Database)

#### *Toxicity to daphnia and other aquatic invertebrates*

EC50 Daphnia magna (Water flea): 6 mg/l; 48 h (ECOTOX Database)

NOEC E.sulcatum: 456 mg/l; 72 h (IUCLID)

#### *Toxicity to algae*

IC50 Pseudokirchneriella subcapitata (green algae): 12 mg/l; 72 h (Lit.)

#### *Toxicity to bacteria*

EC50 Photobacterium phosphoreum: 20 mg/l; 30 min (Lit.)

#### *Theoretical oxygen demand (ThOD)*

3,130 mg/g  
(Lit.)

#### *Distribution among environmental compartments*

##### *Adsorption/Soil*

log Koc: 2.15

(experimental)

Moderately mobile in soils

#### *Henry constant*

683 Pa\*m<sup>3</sup>/mol

(Lit.) Distribution preferentially in air.

---

## **SECTION 13. Disposal considerations**

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

---

## **SECTION 14. Transport information**

### **Land transport (DOT)**

<b>UN number</b>	UN 1866
<b>Proper shipping name</b>	RESIN SOLUTION
<b>Class</b>	3
<b>Packing group</b>	II
<b>Environmentally hazardous</b>	--

### **Air transport (IATA)**

MATERIAL SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number 107960 Version 1.2  
Product name Entellan® rapid mounting medium for microscopy

---

**UN number** UN 1866  
**Proper shipping name** RESIN SOLUTION  
**Class** 3  
**Packing group** II  
**Environmentally hazardous** --  
**Special precautions for user** no

**Sea transport (IMDG)**

**UN number** UN 1866  
**Proper shipping name** RESIN SOLUTION  
**Class** 3  
**Packing group** II  
**Environmentally hazardous** --  
**Special precautions for user** yes  
EmS F-E S-E

---

**SECTION 15. Regulatory information**

**United States of America**

**OSHA Hazards**

Flammable Liquid  
Teratogen  
Target organ effects  
Harmful if swallowed.  
Skin irritant

This information is based on 29 CFR 1910.1200 criteria prior to adoption of the GHS, and may deviate from the GHS information on the label and in section 2.

**SARA 311/312 Hazards**

Fire Hazard  
Acute Health Hazard  
Chronic Health Hazard

**SARA 313**

The following components are subject to reporting levels established by SARA Title III, Section 313:

*Ingredients*

toluene 108-88-3

**SARA 302**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

MATERIAL SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number  
Product name

107960  
Entellan® rapid mounting medium for microscopy

Version 1.2

**Clean Water Act**

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

*Ingredients*

toluene

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

*Ingredients*

toluene

**DEA List I**

Not listed

**DEA List II**

Listed

*Ingredients*

toluene

108-88-3

**US State Regulations**

**Massachusetts Right To Know**

*Ingredients*

toluene

**Pennsylvania Right To Know**

*Ingredients*

toluene

Plexigum MB 319

**New Jersey Right To Know**

*Ingredients*

toluene

Plexigum MB 319

**California Prop 65 Components**

WARNING: This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.

*Ingredients*

toluene

**Notification status**

TSCA:

Not Listed on TSCA inventory. For Research and Development Use only. Not For Manufacturing or Commercial Purposes.

*Ingredients*

Plexigum MB 319

DSL:

This product contains one or several components that are not on the Canadian DSL nor NDSL.

*Ingredients*

Plexigum MB 319

**SECTION 16. Other information**

**Training advice**

Provide adequate information, instruction and training for operators.

# MATERIAL SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number

107960

Version 1.2

Product name

Entellan® rapid mounting medium for microscopy

---

## Full text of H-Statements referred to under sections 2 and 3.

H225	Highly flammable liquid and vapor.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.

## Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can be looked up at [www.wikipedia.org](http://www.wikipedia.org).

Revision Date 08/23/2013

---

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to appropriate safety precautions. It does not represent a warranty of any product properties and we assume no liability for any loss or injury which may result from the use of this information. Users should conduct their own investigations to determine the suitability of the information.

*All rights reserved. Millipore and the "M" Mark are registered trademarks of Merck KGaA, Darmstadt, Germany.*