

according to the Global Harmonized System (and with all of the information required by the CPR)

Revision Date 02/29/2016

Version 1.1

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 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 | 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, H361

Specific target organ systemic toxicity - single exposure, Category 3, Central nervous system, 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

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.

H361 Suspected of damaging fertility or the unborn child.

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H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing.

Rinse skin with water/ shower.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

P321 Specific treatment (see supplemental first aid instructions on this label).

P331 Do NOT induce vomiting.

P332 + P313 If skin irritation occurs: Get medical advice/ attention.

P362 Take off contaminated clothing and wash before reuse.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P403 + P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

P501 Dispose of contents/ container to an approved waste disposal plant.

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

Exact percentages are being withheld as a trade secret.

SECTION 4. First aid measures

Description of first-aid measures

Inhalation

After inhalation: fresh air. Consult a physician.

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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.

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, somnolence, 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 (CO2), 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.

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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.

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 wellventilated place.

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

SECTION 8. Exposure controls/personal protection

Exposure limit(s)

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Basis Value Threshold Remarks

limits

toluene 108-88-3

CAD AB OEL Time Weighted Average 50 ppm

> (TWA): 188 mg/m³

Skin designation: Can be absorbed through the skin.

CAD BC OEL Time Weighted Average 20 ppm

(TWA):

CAD MB OEL Time Weighted Average 20 ppm

(TWA):

CAD ON OEL Time Weighted Average 20 ppm

(TWAEV):

OEL (QUE) Time Weighted Average 50 ppm 188 mg/m³

(TWA):

Skin designation: Can be absorbed through the skin.

Engineering measures

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

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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.

Eye/face protection

Safety glasses

Hand protection

full contact:

Glove material: Viton (R)
Glove thickness: 0.7 mm
Break through time: > 480 min

splash contact:

Glove material: Viton (R)
Glove thickness: 0.7 mm
Break through time: > 480 min

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374, for example KCL 890 Vitoject® (full contact), KCL 890 Vitoject® (splash contact).

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types.

This recommendation applies only to the product stated in the safety data sheet and supplied by us as well as to the purpose specified by us. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Other protective equipment:

Flame retardant antistatic protective clothing.

Respiratory protection

required when vapors/aerosols are generated.

Recommended Filter type: Filter A (acc. to DIN 3181) for vapors of organic compounds. The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are performed according to the instructions of the producer. These measures have to be properly documented.

SECTION 9. Physical and chemical properties

Physical state liquid

Color colorless

Odor characteristic

Odor Threshold No information available.

pH No information available.

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Melting point No information available.

Boiling point No information available.

Flash point 8 °C (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.

Density 0.93 g/cm3

Relative density No information available.

Water solubility at 20 °C (20 °C)

practically insoluble

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 20 °C (20 °C)

Explosive properties Not classified as explosive.

Oxidizing properties none

Ignition temperature > 250 °C (> 250 °C)

SECTION 10. Stability and reactivity

Reactivity

Vapors may form explosive mixture with air.

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

Chemical stability

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

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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.

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

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

Possible damages: slight irritation

CMR effects
Teratogenicity:

Evidence of harm to the unborn child.

Specific target organ systemic toxicity - single exposure

Target Organs: Central nervous system Mixture may cause drowsiness or dizziness.

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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.

Further information

Systemic effects:

After absorption of large quantities:

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

Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

Ingredients

toluene

Acute inhalation toxicity LC50 Rat: 25.7 mg/l; 4 h; vapor OECD Test Guideline 403

Skin irritation Rabbit Result: irritating (ECHA)

Eye irritation Rabbit

Result: No eye irritation

(ECHA)

Germ cell mutagenicity

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Genotoxicity in vivo

Chromosome aberration test

Rat

Result: negative

(ECHA)

Genotoxicity in vitro

In vitro mammalian cell gene mutation test

MOUSE LYMPHOMA TEST

Result: negative

Method: OECD Test Guideline 476

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.

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 (Lit.)

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Henry constant 683 Pa*m³/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)

UN number UN 1866

Proper shipping name RESIN SOLUTION

Class 3
Packing group II
Environmentally hazardous ---

Air transport (IATA)

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
EmS yes
F-E S-E

SECTION 15. Regulatory information

United States of America

Canada

WHMIS Classification

B2 Flammable Liquid

D2A Very Toxic Material Causing Other Toxic Effects
D2B Toxic Material Causing Other Toxic Effects

Flammable Liquid, Teratogen, Skin irritant

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This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

Notification status

TSCA: All components of the product are listed in the TSCA-inventory.

DSL: All components of this product are on the Canadian DSL

SECTION 16. Other information

Training advice

Provide adequate information, instruction and training for operators.

Labeling

Hazard pictograms







Signal Word Danger

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.

H361 Suspected of damaging fertility or the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements

Prevention

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P240 Ground/bond container and receiving equipment.

Response

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P314 Get medical advice/ attention if you feel unwell.

Storage

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

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.

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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.

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