

MATERIAL SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product Name: Pertex Mounting Medium

Product Code: REA222
Manufacturer: Histolab
Brand: Solmedia Ltd

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

Identified uses: PC21 Laboratory chemicals

1.3 Details of the supplier of the safety data sheet

- Name of Supplier: Solmedia Ltd.

- Address of Supplier: Unit 2, Vernon Drive

Battlefield Enterprise Park

Shrewsbury SY1 3TF UK

- Telephone: 0844 80 80 900

- Email: labsupplies@solmedialtd.com

1.4 Emergency telephone number

Emergency Phone # +44 (0)844 80 80 900

SECTION 2: Hazards identification

Classification according to Regulation (EC) No 1272/2008 (CLP/GHS)

2.1 Classification of the substance or mixture

H226: Flam. Liq. 3

H312: Acute tox. 4

H315: Skin Irrit. 2

H332: Acute tox. 4

H373: STOT RE2

2.2 Label elements





Signal word: Warning

Hazard Statements H226 Flammable liquid and vapour.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H332 Harmful if inhaled.

H373 May cause damage to organs (hörselorgan) through prolonged or repeated exposure

Precautionary Statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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

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

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

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

P370+P378 In case of fire: Use Carbon Dioxide, powder or foam for extinction.

2.3 Other hazards

Organic solvents may be absorbed into the body by inhalation and ingestion and cause permanent damage to the nervous system, including the brain.

SECTION 3: Composition/information on ingredients

3.1 Substances

3.2 Mixtures

Substance	Identification	Classification	Contents
Xylene	CAS No.: 1330-20-7	Flam. Liq. 3; H226	30 - 65 %
	EC No.: 215-535-7	Acute Tox. 4; H332	
	Index No.: 601-022-00-9	Acute tox. 4; H312	
	Synonyms: Xylene,	ns: Xylene, Skin Irrit. 2; H315 Note: C	
	mixture of isomers		
Ethylbenzene	CAS No.: 100-41-4	Flam. Liq. 2; H225	0 - 20 %
	EC No.: 202-849-4	Acute Tox. 4; H332	
	Index No.: 601-023-00-4	STOT RE2; H373	



SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation: Move into fresh air and keep at rest. If respiratory problems,

artificial respiration/oxygen. Get medical attention if any discomfort

continues.

Skin Contact: Remove contaminated clothing. Wash skin thoroughly with soap and

water for several minutes. Get medical attention if any discomfort

continues.

Eye Contact: Immediately flush with plenty of water for up to 15 minutes.

Remove any contact lenses and open eyes wide apart. Use

tempered water. To hospital or eye specialist.

Ingestion: Drink plenty of water. Do not give victim anything to drink if he is

unconscious. Do not induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Acute symptoms and effects

Inhalation: Headache, nausea, light-headedness etc. At high concentrations/in

severe cases: unconsciousness.

Ingestion: May cause similar symptoms as on inhalation.

Skin contact: Causes skin irritation. Acts as a defatting agent on skin. Prolonged

or repeated exposure may lead to the substance being absorbed

through the skin.

Eye Contact: Irritating to the eyes.

Delayed symptoms and effects

Same as the acute symptoms

4.3 Indication of any immediate medical attention and special treatment needed

Data lacking

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.



Improper extinguishing media

Data missing.

5.2 Special hazards arising from the substance or mixture

Fire and explosion hazards

Solvent vapours may form explosive mixtures with air.

5.3 Advice for firefighters

Use supplied air respirator if product is involved in a fire. Containers close to fire should be removed or cooled with water.

5.4 Further information

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

In case of inadequate ventilation, use respiratory protection. Do not breathe vapour. Wear protective gloves and, in case of splashes, goggles/face shield too. Wear protective clothing as described in Section 8 of this safety data sheet.

Take precautionary measures against static discharges. Do not smoke, use open fire or other sources of ignition. Stop leak if possible, without risk. Beware of the ignition and explosion danger.

6.2 Environmental precautions

Prevent spillage entering a watercourse or sewer, contaminating soil or vegetation. If this is not possible notify police and appropriate authorities immediately.

6.3 Methods and materials for containment and cleaning up

Dam and absorb spillages with sand, earth or other non-combustible material.

Collect spillage in containers, seal securely and deliver for disposal according to local regulations. Flush area with water.

For waste disposal, see section 13.

6.4 Reference to other sections

See section 7. See section 8. See section 13.

SECTION 7: Handling and storage



7.1 Precautions for safe handling

See section 8 for appropriate protective equipment.

Avoid spilling, skin and eye contact.

Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level. Mechanical ventilation or local exhaust ventilation is required.

Eye wash facilities and emergency shower must be available when handling this product.

Static electricity and formation of sparks must be prevented. Eliminate all sources of ignition. Keep away from heat, sparks and open flame. Risk of vapour concentration on the floor and in low-lying areas.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

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

Protect from heat and direct sunlight. Large amounts and storages should be stored in accordance with national regulation on storage of flammable liquids. Keep away from sources of ignition - No smoking.

Conditions for safe storage

Large amounts and storages should be stored in accordance with national regulation on storage of flammable liquids.

7.3 Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Substance	Identification	Value	TWA Year
Xylene CAS no.: 1330-20-7		8-hour TWA: 50 ppm	2007
	EC no.: 215-535-7	8-hour TWA: 221 mg/m3	
	Index no.: 601-022-00-9	15 min.: 100 ppm	
	Synonyms: Xylene,	15 min.: 442 mg/m3	
	mixture of isomers	Sk	
Ethylbenzene	CAS no.: 100-41-4	8-hour TWA: 200 ppm	2014
	EC no.: 202-849-4	DzU 2014	
	Index no.: 601-023-00-4	8-hour TWA: 441 mg/m3	
	Synonyms: Ethylbenzene	15 min.: 125 ppm	
		15 min.: 400 mg/m3	
		DzU 2014	



DNEL / PNEC from substances

Xylene

	Group	Exposure route	Exposure frequency	Type of effect	Value
DNEL	Worker	Inhalation	Long term (repeated)	Systemic effect	77 mg/m3
	Worker	Inhalation	Short term (acute)	Systemic effect	238 mg/m3
	Worker	Inhalation	Short term (acute)	Local effect	289 mg/m3
	Worker	Dermal	Long term (repeated)	Systemic effect	180 mg/kg body weight/24h
	Consumer	Inhalation	Long term (repeated)	Systemic effect	14,8 mg/m3
	Consumer	Dermal	Long term (repeated)	Systemic effect	108 mg/kg body weight/24h
	Consumer	Oral	Long term (Repeated)	Systemic effect	16 mg/kg body weight/24h
PNEC		Soil			2,31 mg/kg
		Saltwater sediments			12,46 mg/kg
		Freshwater sediments			12,46 mg/kg
		Saltwater			0,327 mg/L
		Freshwater			0,327 mg/L

Ethylbenzene

	Group	Exposure	Exposure frequency	Type of effect	Value
		route			
DNEL	Worker	Inhalation	Long term (repeated)	Systemic effect	77 mg/m3
	Worker	Inhalation	Short term (acute)	Local effect	293 mg/m3
	Worker	Dermal	Long term (repeated)	Systemic effect	180 mg/kg body weight/24h
	Consumer	Inhalation	Long term (repeated)	Systemic effect	15 mg/m3
	Consumer	Oral	Long term (Repeated)	Systemic effect	16 mg/kg body weight/24h
PNEC		Freshwater			0,1 mg/L
		Saltwater Saltwater sediments			0,01 mg/L 1,37 mg/kg
		Freshwater sediments			13,7 mg/kg
		Soil			2,68 mg/kg

8.2 Exposure controls

Well-ventilated area. Work in fume cupboard. Use engineering controls to reduce air contamination to permissible exposure level.



Eye wash and shower facilities must be available when handling this product.



Respiratory protection

In case of inadequate ventilation: Repiratory protection according to European Standard EN 149. Respiratory protection must be used if air contamination exceeds acceptable level.

Hand protection

Wear protective gloves.

Use protective gloves in accordance with standard EN 374.

Suitable materials Protection > 8h: Polyvinyl alcohol (PVA). Viton rubber (fluor rubber). Multilayer material (e.g. 4H, Saranex).

Eye / face protection

Goggles/face shield are recommended. Eyewash bottle with clean water.

Skin protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene / Environmental

Wash at the end of each work shift and before eating, smoking and using the toilet. Remove contaminated clothing and wash the skin thoroughly with soap and water after work.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state Colourless liquid. Viscous.

Colour Colourless.

Odour Aromatic. Sweetish.

Odour limit Value: 20-40 ppm

Comments, pH (as supplied)

Data lacking.



Comments, pH (aqueous solution)

Data lacking.

Comments, Melting point / melting range

Data lacking.

Boiling point / boiling range Value:

137-143 °C

Flash point Value: > 23 °C

Comments, Evaporation rate

Data lacking.

Lower explosion limit with unit of measurement

1 vol%

Upper explosion limit with units of measurement

8 vol%

Vapour pressure Value: ~ 1 kPa

Test temperature: = 20 °C

Comments, Vapour density

No data recorded.

Specific gravity Value: 943 kg/m3

Test temperature: 21 °C

Solubility in water 175 mg/L

Comments, Partition coefficient: n-octanol/water

Data lacking.

Spontaneous combustibility

Value: > 500 °C

Comments, Decomposition temperature

Data lacking.

Viscosity Value: ~ 650 cP

9.2 Other safety information

Data lacking

SECTION 10: Stability and reactivity

10.1 Reactivity

There are no known reactivity hazards associated with this product.



10.2 Chemical stability

Stable under normal temperature conditions and recommended use.

10.3 Possibility of hazardous reactions

May react with: Halogens. Strong oxidizing compounds.

10.4 Conditions to avoid

Avoid exposure to high temperatures or direct sunlight. Avoid heat, flames and other sources of ignition.

10.5 Incompatible materials

Avoid contact with oxidising agents. May attack some plastics, rubber and coatings. Strong oxidising substances. Strong acids. Hydrocarbons - halogenated.

10.6 Hazardous decomposition products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Substance Xylene

Acute toxicity Type of toxicity: Acute

Effect tested: LD50

Route of exposure: Oral

Value: > 2000 mg/kg

Animal test species: Rat

Other information regarding health hazards

General Prolonged and repeated contact with solvents over a long period

may lead to permanent health problems. May cause liver and/or renal damage. The substance is absorbed through: gastrointestinal

tract, lungs, skin.

Inhalation Harmful by inhalation. Vapours have a narcotic effect and may cause

headache, fatigue, dizziness and nausea. Vapour may irritate

respiratory system or lungs.

Skin contact Irritating and degreasing. Prolonged or frequent contact may cause

redness, itching, eczema and skin cracking.



Eye contact Spray and vapour in the eyes may cause irritation and smarting. Risk

of corneal damage.

Ingestion May cause stomach pain or vomiting. May cause symptoms similar

to those listed for inhalation.

Chronic effects Prolonged or frequent inhalation of vapours in high concentrations

may cause permanent damage to the nervous system, including the

brain. May cause damage to the kidneys.

Mutagenicity Data lacking

Carcinogenicity, other information

Data lacking

Reproductive toxicity

Data lacking

STOT-single exposure

Data lacking

STOT-repeated exposure

Data lacking

SECTION 12: Ecological information

12.1 Toxicity

Xylene

	Value	Test Duration	Species	Method
Aquatic Toxicity, fish	2 - 11 mg/L	96H	Roccus saxatilis	LC50
Aquatic toxicity, algae	3 - 5 mg/L	72H	Selenastrum sp.	IC50
Aquatic toxicity, crustacean	1 - 5 mg/L	48H	Daphnia magna	EC50

Ethylbenzene

	Value	Test Duration	Species	Method
Aquatic Toxicity, fish	12,1 mg/L	96H		LC50
Aquatic toxicity, algae	438 mg/L	72H		IC50
Aquatic toxicity, crustacean	1,8 - 2,4 mg/L	48H	Daphnia magna	EC50

Ecotoxicity The product components are not classified as environmentally

hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the

environment.



12.2 Persistence and degradability

Data lacking

12.3 Bioaccumulative potential

Data lacking

12.4 Mobility in soil

Data lacking

12.5 Results of PBT and vPvB assessment

Data lacking

Substance

Xylene

PBT assessment results

Not classified as PBT/vPvB by current EU criteria.

Substance

Ethylbenzene

PBT assessment results

Not classified as PBT/vPvB by current EU criteria.

12.6 Other adverse effects

Data Lacking

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Specify the appropriate methods of disposal

Confirm disposal procedures with environmental engineer and local regulations.

Relevant waste regulation

SFS 2011:927

Product classified as hazardous waste

Yes

Packaging classified as hazardous waste

Yes

EWC waste code



EWC: 160506 laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals

EWC: 180106 chemicals consisting of or containing dangerous

substances

EWC: 180205 chemicals consisting of or containing dangerous

substances

EWC: 20 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR

COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES)

INCLUDING SEPARATELY COLLECTED FRACTIONS

SECTION 14: Transport information

14.1 UN number

1866

14.2 UN proper shipping name

RESIN SOLUTION

14.3 Transport hazard class(es)

3

14.4 Packaging group

Ш

14.5 Environmental hazards

Not relevant

14.6 Special precautions for user

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Product name

Additional information

Not relevant

ADR/RID Other information

Hazard No 30

IMDG Other information

EmS F-E, S-E

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture



Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Commission Regulation (EU) No 453/2010, Annex I. Council Directive (EC) 1272/2008. Avfallsförordningen (2011:927). Water hazard class (WGK): strongly hazardous to water (WGK 3)

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other information

List of relevant H-phrases (Section 2 and 3)

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H332 Harmful if inhaled.

H373 May cause damage to organs through prolonged or repeated exposure

Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]

Flam. Liq. 3; H226

Acute tox. 4; H312

Skin Irrit. 2; H315

Acute tox. 4; H332

STOT RE2; H373

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Solmedia Ltd shall not be held liable for any damage resulting from handling or from contact with the above product.