



M-Tred Top

Material Safety Data Sheet

May 2010

Product Identification

Product name Muralplast M-Tred Top
Use/description High-build two-pack epoxy resin floor finish (coloured)
Composition Base and hardener are supplied in separate containers to be mixed together on site.



Composition of Base	% by weight	CAS Number
Epoxy resin	40-60%	25068-38-6
Epoxy resin	15-25%	28064-14-4
Non-toxic pigments & additives	20-40%	
Composition of Hardener	% by weight	CAS Number
44-isopropylideneddiphenol	5-10%	80-05-7
Benzyl alcohol	25-50%	100-51-6
3-aminomethyl-3,5,5-trimethylcyclohexylamine	25-50%	2855-13-2C
m-phenylenebis(methylamine)	<10%	1477-55-0C
Salicylic acid	<5%	69-72-7

Hazards Identification

Base
Irritating to eyes and skin
Dangerous to the environment
May cause sensitisation by skin contact
Toxic to aquatic organisms
May cause long-term adverse effects in the aquatic environment

Hardener
Causes burns
Harmful by inhalation, in contact with the skin, and if swallowed
Causes burns. May cause sensitisation by skin contact
Harmful to aquatic organisms
May cause long-term adverse effects in the aquatic environment

First Aid Treatment

Skin Contact Wipe off mechanically and wash with plenty of soap and water. Remove contaminated clothing. Cover the affected area with a sterile dressing but do not apply greases or ointments. Seek medical attention.

Eye Contact Hold eyelids apart and rinse immediately with water, continuing for 15 minutes. Seek medical attention immediately.

Inhalation Remove the affected person to fresh air. If breathing has stopped or is laboured, give artificial respiration (eg mouth-to-mouth) and oxygen if available. Seek medical advice. In case of breathing difficulty, or distress, seek medical attention.

Ingestion If swallowed, do not induce vomiting. Give large quantities of water. Seek medical attention immediately.



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Fire Fighting Measures

Special hazards	If involved in a fire, may generate noxious or toxic vapours
Protective equipment	Fire fighters wear self-contained breathing apparatus
Extinguishing agents	Foam, dry powder, CO ² or water spray

Accidental Release

Personal precautions	Wear full protective clothing when dealing with a spillage
Clean up methods	Absorb with earth, sand or other absorbent materials

Handling & Storage

Handling	Wear goggles or a face shield, impervious gloves and protective clothing
Storage	Store in cool, dry, well ventilated area away from foodstuffs

Exposure Controls / Personal Protection

During application	Wear goggles or face shield, impervious gloves and protective clothing, and barrier cream. Apply in a well ventilated area. Keep away from food stuffs and feed. Wash hands before breaks and at the end of working.
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Physical & Chemical Properties

Base

Physical state	Pigment dispersion in liquid resin
Colour	Varies according to shade of finish required
Odour	Weak odour
Vapour pressure	<0.01 kPa at 20°C
Boiling Point (°C)	>150
Flash point (°C)	>100
Density	About 1.4 g/cm ³ at 20°C
Solubility	Immiscible with water
Viscosity	< 1 Pa.s at 25°C

Hardener

Physical state	Free-flowing liquid
Colour	Pale yellow
Odour	Ammoniacal, irritating
Vapour pressure	About 0.13 kPa at 20°C
Boiling Point (°C)	205
Flash point (°C)	105
Density	About 1.05 g/cm ³ at 20°C
Solubility	Partially miscible with water
Viscosity	< 1 Pa.s at 25°C

Stability & Reactivity

Base	May react exothermally with amines and mercaptans, also with acids. In case of fire, carbon monoxide, carbon dioxide and other harmful gases may be formed.
Hardener	Reacts exothermally with acids. Liberates ammonia when heated. In case of a fire, toxic fumes or nitrogen oxides, amines and carbon monoxide may be formed. Nitrogen oxide can react with water vapours to form corrosive nitric acid.

Toxicological Information

Base	LD50 oral, rat >5000 mg/kg. Epoxy resins such as contained in this product have been shown to cause irritation in humans on skin and eyes. Sensitisation by skin contact may also occur.
Hardener	LD50 oral, not determined for this blend of materials. LD50 benzyl; alcohol 1230 oral; LD50 m-phenylenebis(methylamine) 1040 oral. The amine/diamine constituents of this product are corrosive to skin and irritant to eyes, and may cause sensitisation.



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Ecological Information

Environmental precautions Prevent from entering the sewer system, surface water, or soil. Epoxy resins such as contained in this product have been shown to be toxic to fish and are not readily biodegradable

Disposal Considerations

Waste Burn in a hazardous waste incinerator.
Do not re-use containers.
Disposal of waste must be in accordance with local/national regulations.

Transportation Information

Hazardous labels

Base Xi irritant. Contains epoxy constituents, see information supplied by the manufacturer.
N Dangerous to the environment ADR, Class 9 IMO, IATA: Non-classifiable.
UN No: 3082 environmentally hazardous liquid n.o.s.

Hardener ADR/RID: 2735 Corrosive liquid, NOS (polyamines contains isophoronediamine and m-phenylenebis(methylamine)) 8, (C7)iii.

IMDG corrosive liquid NOS (polyamines contains isophoronediamine and m-phenylenebis(methylamine)); 8 UN 2735; iii;
ICAO/IATA: Corrosive Liquid, NOS (polyamines containing isophoronediamine and m-phenylenebis(methylamine)); 8; UN 2735; iii; FP 105C.

Regulatory Information

Base

Hazardous labels Xi irritant, contains epoxy constituents, see information supplied by the manufacturer.
N Dangerous to the environment.

R-phrases R36/38 Irritating to the eyes and skin.
R43 May cause sensitisation by skin contact.
R51/53 Toxic to aquatic organisms. may cause long-term adverse effects in the aquatic environment.

S-phrases S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28 After contact with skin, wash immediately with plenty of soap and water.
S36 Wear suitable protective clothing.
S61 Avoid release to the environment. Refer to special instructions/Safety Data Sheet.

Hardener

Hazardous labels C Corrosive.

R-phrases R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
R34 Causes burns.
R43 May cause sensitisation by skin contact.
R52/53 Harmful to aquatic organisms, may cause long-term effects to the aquatic environment.



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S-phrases

- S9 Keep container in a well-ventilated place.
- S20 When using do not eat or drink.
- S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
- S45 In case of accident, or if you feel unwell, seek medical advice immediately (show the label where possible).
- S61 Avoid release to the environment. Refer to special instructions/Safety Data Sheet.

Other Information

Liquid epoxy resins are classified as dangerous to the environment under a voluntary agreement by the Association of Plastic Manufacturers Europe (APME) based on available data. Muralplast Ltd has adopted this practice as part of their duty of care under the Environmental Protection Act 1992.

The base and hardener are mixed together in the approximate ratio as follows:

base: 60-80% by weight

hardener: 20-40% by weight

All the foregoing information should be regarded as being applicable to the finished paint as well as to the individual base and hardener components.

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