



M-Tred WB

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	20-40%	25068-38-6
Non-toxic pigments*, water and non-toxic & additives	40-80%	
Composition of Hardener	% by weight	CAS Number
3,6,9,12-tetraazatetradecane-1, 14-diamine	<3%	4067-16-7C N
Polyamide	20-40%	
Water & non-toxic additives	60-80%	

* Except M-Tred WB Clear

Hazards Identification

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

Hardener
Irritating to eyes and skin
Toxic to aquatic organisms
May cause long-term adverse effects in the aquatic environment
May cause sensitisation by skin contact
Risk of serious damage to eyes

First Aid Treatment

Skin Contact Rinse immediately with plenty of soap and water. Remove contaminated clothing. In case of persistent irritation, or if a rash develops, 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 and allow to rest. In case of breathing difficulty, or distress, seek medical attention.

Ingestion Immediately rinse mouth with water and seek medical attention. If this is not immediately available, drink 1 or 2 pint4s of water.



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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
Environmental precautions	Prevent from entering sewer system, surface water, or soil
Clean up methods	Absorb with earth, sand or other absorbent materials. Wash the area clean with water spray. Contain wash water and dispose safely.

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. Keep containers sealed until mixing.

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.
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Physical & Chemical Properties

Base

Physical state	Pigment dispersion in water-based liquid
Colour	Varies according to shade of finish required
Odour	Weak odour
Vapour pressure	About 2.3 kPa at 20°C
Boiling Point (°C)	100
Flash point (°C)	>200
Density	About 1.35 g/cm ³ at 20°C
Solubility	Miscible with water
Viscosity	< 1 Pa.s at 25°C

Hardener

Physical state	Water-based clear liquid
Colour	Yellow
Odour	Slightly ammoniacal
Vapour pressure	About 0.23 kPa at 20°C
Boiling Point (°C)	100
Flash point (°C)	Not determined
Self-ignition (°C)	>150
Density	About 1.02 g/cm ³ at 20°C
Solubility	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.

Toxicological Information

Base	LD50 oral, rat >15000 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, rat >15000 mg/kg estimate. The polyamide as contained in this product is an irritant to skin and a severe irritant to eyes. When opening the container some ammonia may escape, which may irritate the respiratory tract.



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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. Whilst no data is available for the Hardener solution it is reasonable to assume that this will be toxic to aquatic organisms and may cause long-term adverse effects to the aquatic environment

Disposal Considerations

Waste

Care should be taken to ensure that all containers are properly and thoroughly cleaned prior to disposal to minimise risk of environmental pollution. Check with local/national waste regulations and Local Authorities with regard to acceptable routes for disposal. Due to the solubility of the hardener it must be assumed that landfill options are less desirable than other routes.

Transportation Information

Hazardous labels

Base

ADR/RID: Class 9, 11c, Hazard No. 90, UN No 3082
Environmentally hazardous substance, liquid, n.o.s.
IMDG: Not regulated.
CAO/IATA: Not regulated.

Hardener

ADR environmentally hazardous substance liquid nos (Pentaethylene hexamine)
Class 9 hazard no 90 pg III UN 3082.

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

S24 Avoid contact with skin.
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.
S37/39 Wear suitable gloves and eye/face protection.
S61 Avoid release to the environment. Refer to special instructions/Safety Data Sheet.

Hardener

Hazardous labels Xi Irritant.
N Dangerous to the environment.

R-phrases

R38 Irritating to eyes and skin.
R41 Risk of serious damage to eyes.
R43 May cause sensitisation by skin contact.
R51/53 Harmful to aquatic organisms, may cause long-term effects to the aquatic environment.



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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.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S61 Avoid release to the environment (refer to special instructions/datasheet).

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:

Pigmented systems base: 50-60% by weight.

Hardener: 40-50% by weight.

Clear base: 60-70% by weight.

Hardener: 30-40% 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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