



MSDS Ref:
TR 303

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Publication Date
11/04/1997

Revision Date
09/09/2011

1. PRODUCT NAME

TRIMOL 23 RESIN

2. HAZARD IDENTIFICATION



Irritant
Irritating to skin and eyes.

3. COMPOSITION

HAZARDOUS INGREDIENT	CAS Nos.	Weight %	Symbols	Risk Phrases
Bisphenol A and F epoxy Resins, diglycidyl ethers	25068-38-6, 68609-97-2 28064-14-4	49	Xi (Irritant)	R36/38,43, 51/53

4. FIRST AID

CONTACT WITH SKIN:	Wash with plenty of soap and water.
CONTACT WITH EYES:	Wash out with water for several minutes and seek medical advice.
INGESTION:	Seek medical advice in the event of discomfort.
INHALATION:	Remove to fresh air if fumes cause irritation of nose or throat.
OTHER INFORMATION:	May aggravate existing respiratory problems.

5. FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA:	Dry powder or foam. For small fires use CO ₂ . Never use water jet.
SPECIAL PROTECTIVE EQUIPMENT:	For fires in confined spaces, use breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:	Wear suitable protective clothing appropriate to the amount involved, which may include eye/face protection, PVC or synthetic rubber gloves, protective footwear and overalls. Avoid contact with skin, eyes and clothing.
ENVIRONMENTAL PRECAUTIONS:	Do not allow to enter public sewers and watercourses If this cannot be avoided, inform the appropriate authority.
CLEAN-UP PROCEDURES:	Absorb in dry sand or earth or similar absorbents and shovel into a suitable closed container for disposal according to item 13.

7. HANDLING AND STORAGE

HANDLING PRECAUTIONS: Observe good hygiene standards and minimise skin contact. Wear suitable protective clothing according to item 8.

STORAGE INFORMATION: Keep containers tightly closed in a cool place, out of direct sunlight. Keep stored well ventilated.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION



Where prolonged or repeated exposure is likely, protective clothing should be worn, including eye protection, boots and PVC or synthetic rubber gloves.
Wash hands and exposed skin before meals and after work.
Do not eat, drink or smoke whilst handling the product.
Do not wear contaminated clothing. Ventilate confined spaces thoroughly.

EXPOSURE LIMITS None prescribed in EH40

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Black paste	Oxidising Properties	None
Odour	Faint	Vapour Pressure	1Pa (20°C)
pH	7 (50% suspension in water)	Relative density	1.6 (15°C)
Boiling Point	Decomposes	Bulk density	Not Relevant
Melting Point	Not relevant	Viscosity	Thixotropic
Flash Point	>150°C	Solubility	Insoluble in water
Autoignition temperature	No data	Partition Coefficient	No data
Explosive properties	No data	Other data	

10. STABILITY / REACTIVITY

STABILITY: Stable under normal conditions of use.

CONDITIONS TO AVOID: High temperatures (degrades resin).

MATERIALS TO AVOID: Strong oxidising agents, acids and bases.
Excess of hardener (uncontrolled polymerisation reaction).

11. TOXICOLOGICAL INFORMATION

No available data on acute toxicity. Irritating to eyes. A mild skin irritant and mild sensitising agent.

12. ECOLOGICAL INFORMATION

MOBILITY: Low soil absorption

DEGRADABILITY: Not easily biodegradable.

ACCUMULATION: There is potential for bioaccumulation. Biomagnification is unlikely.

ECTOTOXICITY: Toxic to aquatic organisms (data for 100% resin): (TLm96: fish 1.2mg/litre, Daphnia 2.7 mg/litre, algae 9.4mg/litre).



13. DISPOSAL INFORMATION

DISPOSAL OF PRODUCT: Chemical residues are normally regarded as special waste. Dispose of in accordance with local and national regulations (incinerate or landfill).

DISPOSAL OF PACKAGING: Uncleaned packaging should be treated as for the product.

14. TRANSPORT INFORMATION

UN No. None assigned
PROPER SHIPPING NAME Liquid Epoxy Resin
ADR/RID Not classified as hazardous
IMCO Not classified as hazardous
MFAG Table No.
EmS No.
IATO/IACO Not classified as hazardous
PACKING GROUP
LABEL No hazard label

15. REGULATORY INFORMATION

CLASSIFICATION: Xi Irritant

LABEL INFORMATION S24: Irritating to eyes and skin.
S26: May cause sensitisation by skin contact.
S28: After contact with skin, wash immediately with plenty of water.
S37/39: Wear suitable gloves and eye/face protection.

Refer to other relevant legislation such as Health and Safety at Work etc., Act (HSWA), the Control of Substances Hazardous to Health Regulations (COSHH), the Environment Protection Act and the Control of Pollution Act.

The information contained in this safety data sheet does not constitute the user's own assessment of workplace risk as required by health and safety legislation.

16. OTHER INFORMATION

The information contained in this data is to the best of our knowledge accurate at the date of publication, but we cannot accept responsibility that it is sufficient or correct in all cases.

The data contained herein does not constitute a specification. Such information is available from the technical data sheet for the product.

Abbreviations: OES – occupational exposure standard. STEL – short-term exposure limit. LTEL – long term exposure limit. TWA – time weighted (8 hour) average. LEL – lower explosive limit. UEL – upper explosive limit.



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Publication Date
04/04/1997

Revision Date
09/09/2011

1. PRODUCT NAME

TRIMOL 23 HARDENER

2. HAZARD IDENTIFICATION



Corrosive – Causes burns
Harmful if swallowed
May cause sensitisation by skin contact

3. COMPOSITION

HAZARDOUS INGREDIENT	CAS Nos.	EC No.	Weight %	Symbols	Risk Phrases
Trimethylhexamethylene diamine	25620-58-0	247-134-8	12	C (Corrosive)	R22,34,43,52/53

4. FIRST AID

CONTACT WITH SKIN:	Wash with plenty of soap and water. If irritation persists, obtain medical advice.
CONTACT WITH EYES:	Wash out with water for several minutes and seek medical advice.
INGESTION:	Give plenty of water – if possible, charcoal slurry. Do not induce vomiting.
INHALATION:	Remove to fresh air. If symptoms persist, seek medical advice.
OTHER INFORMATION:	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA:	Dry powder or foam. For small fires use CO ₂ , never use water jet.
SPECIAL PROTECTIVE EQUIPMENT:	For fires in confined spaces, use breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:	Wear suitable protective clothing appropriate to the amount involved, which may include eye/face protection, PVC or synthetic rubber gloves, protective footwear and overalls.
ENVIRONMENTAL PRECAUTIONS:	Do not allow to enter public sewers and watercourses If this cannot be avoided, inform the appropriate authority.
CLEAN-UP PROCEDURES:	Absorb in dry sand or earth or similar absorbents and shovel into a suitable closed container for disposal according to item 13.

7. HANDLING AND STORAGE

HANDLING PRECAUTIONS: Ensure adequate ventilation in work areas. Keep away from sources of ignition – no smoking. Handle and open container with care.

STORAGE INFORMATION: Keep containers tightly closed in a cool place, out of direct sunlight. Keep stored well ventilated. Keep away from food and feeding stuffs.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION



Wear protective clothing should be worn, including eye protection, boots and PVC or synthetic rubber gloves. In case of insufficient ventilation, wear suitable respiratory protective equipment. Wash hands and exposed skin before meals and after work. Do not eat, drink or smoke whilst handling the product.

EXPOSURE LIMITS None prescribed in EH40

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White Paste
Odour	Amine - like
pH	11.3 (50% in water)
Boiling Point	Decomposes above 200°C
Melting Point	Not relevant
Flash Point	>108°C (CC)
Autoignition temperature	No data
Explosive properties	No data

Oxidising Properties	None
Vapour Pressure	6Pa (20°C)
Relative density	1.4 (20°C)
Bulk density	Not Relevant
Viscosity	Thixotropic
Solubility	Partially miscible in water
Partition Coefficient	No data
Other data	

10. STABILITY / REACTIVITY

STABILITY: Stable under normal conditions of use.

CONDITIONS TO AVOID: High temperatures, formation of aerosols, static discharges.

MATERIALS TO AVOID: Strong oxidising agents, acids and bases.

11. TOXICOLOGICAL INFORMATION

LD₅₀ (rat, oral): 7600mg/kg. (by calculation). Eye irritation (rabbit): corrosive. Skin irritation (rabbit): Corrosive.

Dermal sensitisation (guinea pig): sensitiser.

12. ECOLOGICAL INFORMATION

MOBILITY:	Avoid subsoil penetration.
DEGRADABILITY:	Not easily biodegradable.
ACCUMULATION:	There is potential for bioaccumulation. Biomagnification is unlikely.
ECTOTOXICITY:	Toxic to aquatic organisms: Data for 100% amine: (LC ₅₀ (fish) 96h:1000mg/litre, EC ₅₀ (daphnia) 24h:31.5mg/litre EC ₅₀ (algae) 72h: 29.5mg/litre), IC ₅₀ (bacteria) 3h:100mg/litre).

13. DISPOSAL INFORMATION

DISPOSAL OF PRODUCT:	Chemical residues are normally regarded as special waste. Incinerate in compliance with the Environmental Protection Act 1990 (Process Guidance Note IPR5/1)
DISPOSAL OF PACKAGING:	Uncleaned packaging should be treated as for the product. After cleaning, can be landfilled.

14. TRANSPORT INFORMATION

UN No.	2327
PROPER SHIPPING NAME	Trimethylhexamethylene diamines, solution
ADR/RID	Class 8. Item 53(c)
IMCO	Class 8 IMDG Code page 08243
	MFAG Table No. 320
IATO/IACO	EmS No. 8.05
PACKING GROUP	Class 8
LABEL	3 Corrosive



15. REGULATORY INFORMATION

CLASSIFICATION:	Corrosive
LABEL INFORMATION	R34: Causes burns R22: Harmful if swallowed R43: May cause sensitisation by skin contact R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. 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 (show the label where possible).

Refer to other relevant legislation such as Health and Safety at Work etc., Act (HSWA), the Control of Substances Hazardous to Health Regulations (COSHH), the Environment Protection Act and the Control of Pollution Act.

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