



SAFETY DATA SHEET TREADMASTER MARINE EPOXY ADHESIVE PART A

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

1.1. Product identifier

Product name TREADMASTER MARINE EPOXY ADHESIVE PART A

EU REACH registration notes All chemicals used in this product have been registered under REACH where required.

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

Identified uses Adhesive.

Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier Tiflex Ltd
Tiflex House
Trebargie Water
Liskeard
Cornwall
PL14 4NB
Tel: +44 (0) 1579 320 808
Fax: +44 (0) 1579 320 802
Email: sward@tiflex.co.uk

1.4. Emergency telephone number

Emergency telephone +44 (0) 1579 320 808 (NOT 24HRS - 9am-5pm Mon-Thurs, 9am-4pm Fri)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (SI 2019 No. 720)

Physical hazards Not Classified

Health hazards Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317

Environmental hazards Aquatic Chronic 2 - H411

Human health The product contains a sensitising substance. May cause sensitisation or allergic reactions in sensitive individuals. May irritate eyes and skin.

Environmental The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

2.2. Label elements

Hazard pictograms



Signal word Warning

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Hazard statements	H315 Causes skin irritation. H319 Causes serious eye irritation. H317 May cause an allergic skin reaction. H411 Toxic to aquatic life with long lasting effects.
Precautionary statements	P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P302+P352 IF ON SKIN: Wash with plenty of water. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P332+P313 If skin irritation occurs: Get medical advice/ attention. P333+P313 If skin irritation or rash occurs: Get medical advice/ attention. P501 Dispose of contents/ container in accordance with national regulations.
Contains	bis[4-(2,3-EPOXYPROPOXY)PHENYL]PROPANE, bisphenolF-epoxy resin
Supplementary precautionary statements	P261 Avoid breathing vapour/ spray. P264 Wash contaminated skin thoroughly after handling. P272 Contaminated work clothing should not be allowed out of the workplace. P273 Avoid release to the environment. P321 Specific treatment (see medical advice on this label). P337+P313 If eye irritation persists: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

bis[4-(2,3-EPOXYPROPOXY)PHENYL]PROPANE	20-35%
CAS number: 1675-54-3	EC number: 216-823-5
Classification	
Skin Irrit. 2 - H315	
Eye Irrit. 2 - H319	
Skin Sens. 1 - H317	
Aquatic Chronic 2 - H411	
Reaction Product: bisphenol F-(epichlorohydrin); epoxy resin	20-35%
CAS number: 9003-36-5	EC number: 500-006-8
Classification	
Skin Irrit. 2 - H315	
Skin Sens. 1 - H317	
Aquatic Chronic 2 - H411	

The full text for all hazard statements is displayed in Section 16.

Composition comments The product contains a sensitising substance.

Chemical Nature

chemical nature

SECTION 4: First aid measures

4.1. Description of first aid measures

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General information	Remove affected person from source of contamination.
Inhalation	Move affected person to fresh air at once.
Ingestion	Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention if a large quantity has been ingested. Show this Safety Data Sheet to the medical personnel.
Skin contact	Rinse immediately with plenty of water. Remove contaminated clothing. Get medical attention if any discomfort continues.
Eye contact	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Rinse with water. Get medical attention if any discomfort continues.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue. It may be dangerous for first aid personnel to carry out mouth-to-mouth resuscitation.

4.2. Most important symptoms and effects, both acute and delayed

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	No specific symptoms known.
Ingestion	May cause stomach pain or vomiting.
Skin contact	Prolonged skin contact may cause redness and irritation.
Eye contact	May cause temporary eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	No specific recommendations. If in doubt, get medical attention promptly.
Specific treatments	Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with foam, carbon dioxide, dry powder or water fog.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	Thermal decomposition or combustion products may include the following substances: Irritating gases or vapours. Carbon dioxide (CO ₂). Carbon monoxide (CO). Nitrous gases (NO _x).
Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Irritating gases or vapours. Carbon dioxide (CO ₂). Carbon monoxide (CO). Nitrous gases (NO _x).

5.3. Advice for firefighters

Protective actions during firefighting	Containers close to fire should be removed or cooled with water.
Special protective equipment for firefighters	Wear chemical protective suit. Use air-supplied respirator, gloves and protective goggles.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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Personal precautions Ensure suitable respiratory protection is worn during removal of spillages in confined areas. Do not touch or walk into spilled material. Avoid contact with skin, eyes and clothing.

For non-emergency personnel Wear protective clothing as described in Section 8 of this safety data sheet.

For emergency responders Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions Avoid discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Absorb in vermiculite, dry sand or earth and place into containers.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. See Section 11 for additional information on health hazards.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid spilling. Wear eye and face protection. For personal protection, see Section 8.

Advice on general occupational hygiene When using do not eat, drink or smoke. Wash promptly with soap and water if skin becomes contaminated. Take off immediately all contaminated clothing and wash it before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store at temperatures between 5°C and 25°C. Store in tightly-closed, original container in a dry and cool place.

Storage class Miscellaneous hazardous material storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

Usage description Adhesive.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

bis[4-(2,3-EPOXYPROPOXY)PHENYL]PROPANE (CAS: 1675-54-3)

DNEL	Workers - Dermal; Short term : 8.33 mg/kg/day Workers - Inhalation; Short term : 12.25 mg/kg/day
PNEC	- Fresh water; 0.006 mg/l

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients. As this product contains ingredients with exposure limits, process enclosures, local exhaust ventilation or other engineering controls should be used to keep worker exposure below any statutory or recommended limits, if use generates dust, fumes, gas, vapour or mist.

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Eye/face protection	Wear chemical splash goggles. Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment that provides appropriate eye and face protection should be worn.
Hand protection	The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, wear gloves that are proven to be impervious to the chemical and resist degradation. The selected gloves should have a breakthrough time of at least 6 hours. Wear protective gauntlets made of the following material: Butyl rubber.
Other skin and body protection	Wear suitable protective clothing as protection against splashing or contamination.
Hygiene measures	Use engineering controls to reduce air contamination to permissible exposure level. Wash hands thoroughly after handling. Wash skin thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas.
Respiratory protection	If ventilation is inadequate, suitable respiratory protection must be worn. Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is 'UKCA'-marked. Wear a respirator fitted with the following cartridge: Combination filter, type A2/P3.
Thermal hazards	Contact with hot product can cause serious thermal burns.
Environmental exposure controls	Keep container tightly sealed when not in use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Coloured paste.
Colour	White/off-white.
Odour	Mild.
Odour threshold	Not applicable.
pH	Not applicable.
Melting point	Not applicable.
Flash point	Not determined.
Evaporation rate	Not applicable.
Evaporation factor	Not applicable.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not applicable.
Other flammability	No information available.
Vapour pressure	Not applicable.
Vapour density	Not applicable.
Relative density	1.46 @ 20°C
Bulk density	Not applicable.
Solubility(ies)	Insoluble in water. Soluble in the following materials: Aromatic solvents.

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Viscosity	300,000 - 400,000 cP @ 20°C
Comments	Information declared as "Not available" or "Not applicable" is not considered to be relevant to the implementation of the proper control measures.

9.2. Other information

Other information	No information required.
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	The following materials may react with the product: Acids. Alkalis. Amines.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	The following materials may react with the product: Acids. Alkalis. Amines.
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10.4. Conditions to avoid

Conditions to avoid	Reactions with the following materials may generate heat: Alkalis. Amines.
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10.5. Incompatible materials

Materials to avoid	Strong acids. Strong alkalis. Amines.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Heating may generate the following products: Carbon dioxide (CO ₂). Carbon monoxide (CO). Nitrous gases (NO _x).
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

General information	Contains epoxy constituents. May produce an allergic reaction.
Inhalation	The product contains a sensitising substance.
Ingestion	May cause discomfort if swallowed.
Skin contact	Irritating to skin. May cause sensitisation by skin contact.
Eye contact	Causes serious eye irritation.
Acute and chronic health hazards	May cause sensitisation by skin contact.
Route of exposure	Skin absorption

Toxicological information on ingredients.

Reaction Product: bisphenol F-(epichlorohydrin); epoxy resin

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 2,000.0

Species Rat

Notes (oral LD₅₀) LD₅₀ > 2000 mg/kg, Oral, Rat

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SECTION 12: Ecological information

Ecotoxicity Dangerous for the environment if discharged into watercourses. Toxic to aquatic life with long lasting effects.

12.1. Toxicity

Ecological information on ingredients.

Reaction Product: bisphenol F-(epichlorohydrin); epoxy resin

Toxicity	Toxic to aquatic life with long lasting effects.
<u>Acute aquatic toxicity</u>	
Acute toxicity - fish	LC50, 96 hours: 2.54 mg/l, Freshwater fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 96 hours: > 1000 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: > 1.8 mg/l, Selenastrum capricornutum
Acute toxicity - microorganisms	IC ₅₀ , 3 hours: >100 mg/l, Activated sludge
<u>Chronic aquatic toxicity</u>	
Chronic toxicity - aquatic invertebrates	NOEC, 21 days: 0.3 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability The degradability of the product is not known.

Ecological information on ingredients.

Reaction Product: bisphenol F-(epichlorohydrin); epoxy resin

Persistence and degradability	The product is not readily biodegradable.
Biodegradation	- Degradation 0%: 28 days

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Ecological information on ingredients.

Reaction Product: bisphenol F-(epichlorohydrin); epoxy resin

Bioaccumulative potential	Potentially bioaccumulating. BCF: 150 Estimated Value,
Partition coefficient	log Pow: 3.6

12.4. Mobility in soil

Mobility The product is insoluble in water.

Ecological information on ingredients.

Reaction Product: bisphenol F-(epichlorohydrin); epoxy resin

Mobility	Not considered mobile.
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Adsorption/desorption coefficient - Koc: 4460 @ 20°C

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients.

Reaction Product: bisphenol F-(epichlorohydrin); epoxy resin

Results of PBT and vPvB assessment No data available.

12.6. Other adverse effects

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID)	3082
UN No. (IMDG)	3082
UN No. (ICAO)	3082
UN No. (ADN)	3082

14.2. UN proper shipping name

Proper shipping name (ADR/RID) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Proper shipping name (IMDG) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Proper shipping name (ICAO) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

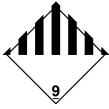
Proper shipping name (ADN) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

14.3. Transport hazard class(es)

ADR/RID class	9
ADR/RID classification code	M6
ADR/RID label	9
IMDG class	9
ICAO class/division	9
ADN class	9

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Transport labels



14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ICAO packing group	III
ADN packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

EmS	F-A, S-F
ADR transport category	3
Emergency Action Code	•3Z
Hazard Identification Number (ADR/RID)	90
Tunnel restriction code	(E)

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

SECTION 15: Regulatory information

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

National regulations	The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended). The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).
Guidance	Workplace Exposure Limits EH40.
Authorisations (SI 2020 No. 1577 Annex XIV)	No specific authorisations are known for this product.
Restrictions (SI 2020 No. 1577 Annex XVII)	No specific restrictions on use are known for this product.

15.2. Chemical safety assessment

SECTION 16: Other information

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Abbreviations and acronyms used in the safety data sheet	<p>ATE: Acute Toxicity Estimate.</p> <p>ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.</p> <p>CAS: Chemical Abstracts Service.</p> <p>DNEL: Derived No Effect Level.</p> <p>GHS: Globally Harmonized System.</p> <p>IATA: International Air Transport Association.</p> <p>ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.</p> <p>IMDG: International Maritime Dangerous Goods.</p> <p>Kow: Octanol-water partition coefficient.</p> <p>LC50: Lethal Concentration to 50 % of a test population.</p> <p>LD50: Lethal Dose to 50% of a test population (Median Lethal Dose).</p> <p>PBT: Persistent, Bioaccumulative and Toxic substance.</p> <p>PNEC: Predicted No Effect Concentration.</p> <p>REACH: The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577.</p> <p>RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.</p> <p>SVHC: Substances of Very High Concern.</p> <p>vPvB: Very Persistent and Very Bioaccumulative.</p> <p>IARC: International Agency for Research on Cancer.</p> <p>MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.</p> <p>cATpE: Converted acute toxicity point estimate.</p> <p>BCF: Bioconcentration Factor.</p> <p>BOD: Biochemical Oxygen Demand.</p> <p>EC₅₀: 50% of maximal Effective Concentration.</p> <p>LOAEC: Lowest Observed Adverse Effect Concentration.</p> <p>LOAEL: Lowest Observed Adverse Effect Level.</p> <p>NOAEL: No Observed Adverse Effect Level.</p> <p>NOEC: No Observed Effect Concentration.</p> <p>LOEC: Lowest Observed Effect Concentration.</p> <p>DMEL: Derived Minimal Effect Level.</p> <p>UN: United Nations.</p> <p>IBC: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk (International Bulk Chemical Code).</p>
Key literature references and sources for data	Dangerous Properties of Industrial Materials Report, N.Sax et.al.
Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	10/05/2022
Revision	7
Supersedes date	11/01/2022
SDS number	21715
Hazard statements in full	<p>H315 Causes skin irritation.</p> <p>H317 May cause an allergic skin reaction.</p> <p>H319 Causes serious eye irritation.</p> <p>H411 Toxic to aquatic life with long lasting effects.</p>

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.