

TRICAST 50 EPOXY RESIN SYSTEM PART B

Product Name:	TriCast 50 Epoxy Resin System Part B 1154677 Rev. 4
Revision Date:	03-Jan-2023 According to Regulation (EC) No. 1907/2006

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product Identifier

Product Name: TriCast 50 Epoxy Resin System Part B

Substance Name: Polyoxypropylentriamine

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

Product Use: Tooling system

1.3. Details of the supplier of the safety data sheet

Tricel Composites (GB) Limited

Unit A, Foxway,
Off Atkinson Street,
Leeds, West Yorkshire,
LS10 1PS.
Tel: +44 (0)113 270 3133

Tricel Composites (NI) Limited

Unit 4, Milltown Ind. Estate, Greenan
Road. Warrenpoint, Newry
Co. Down,
BT34 3FN.
Tel: +44 (0)284 175 3738

1.4. Emergency Telephone Number

Leeds:	Newry:
Tel: +44 (0)113 270 3133 (office hours 9-5pm)	Tel: +44 (0)284 175 3738 (office hours 9-5pm)

UK: National Poisons Emergency Number : 0344 892 0111 (for healthcare professionals use only). NHS public service number NHS 111.

Ireland: Emergency medical information: 8am-10pm (7 days) contact National Poisons Information Centre, Beaumont Hospital, Dublin 9 DOV2NO, Ireland. Telephone Healthcare Professionals: +353 (01) 809 2566. (24-hour service) & Telephone Members of Public: +353 (01) 809 2166. (8.00 a.m. to 10.00 p.m. 7 days a week)

2. Hazards Identification

2.1. Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 4

Acute toxicity, Category 4

Serious eye damage, Category 1

Long-term (chronic) aquatic hazard, Category 2

H302: Harmful if swallowed.

H312: Harmful in contact with skin.

H318: Causes serious eye damage.

H411: Toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazard Pictograms:



Signal Word: Danger

2.2.1. Hazard Statements

- H302 + H312 Harmful if swallowed or in contact with skin.
H318 Causes serious eye damage.
H411 Toxic to aquatic life with long lasting effects.

2.2.2. Precautionary Statements

Prevention:

- P264 Wash skin thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

- P302 + P352 + P312 IF ON SKIN: Wash with plenty of water. Call a POISON CENTER/ doctor if you feel unwell.
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.
P391 Collect spillage.

2.3. Other Hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

3. Composition/Information on Ingredients

3.1. Substances

EC-No. : 500-105-8

Components

Chemical name	CAS-No. EC-No.	Concentration (% w/w)	M-Factor, SCL, ATE
Polyoxypropylentriamine	39423-51-3 500-105-6	100	Acute toxicity estimate Acute oral toxicity: 550 mg/kg Acute dermal toxicity: 1.001 mg/kg

4. First Aid Measures

4.1. Description of First Aid Measures

General advice: Move out of dangerous area.
Consult a physician.
Show this safety data sheet to the doctor in attendance.

If inhaled:	Move to fresh air. Consult a physician after significant exposure.
In case of skin contact:	Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. If symptoms persist, call a physician.
In case of eye contact:	Small amounts splashed into eyes can cause irreversible tissue damage and blindness. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Continue rinsing eyes during transport to hospital. Remove contact lenses. Keep eye wide open while rinsing.
If swallowed:	Do not induce vomiting without medical advice. Rinse mouth with water. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person.

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

Symptoms:	Gastrointestinal discomfort Excessive lachrymation Skin disorders See Section 11 for more detailed information on health effects and symptoms.
Risks:	No known significant effects or hazards. Harmful if swallowed or in contact with skin. Causes serious eye damage.

4.3. Indication of any immediate medical attention and special treatment

Treatment:	Treat symptomatically
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5. Firefighting Measures

5.1. Extinguishing media

Suitable extinguishing media: In case of fire, use water/water spray/water jet/carbon dioxide/sand/foam/alcohol resistant foam/chemical powder for extinction.

5.2. Special hazards arising from the substance or mixture

Specific hazards during firefighting: Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products: No hazardous combustion products are known

5.3. Advice for firefighters

Special protective equipment

for firefighters: In the event of fire, wear self-contained breathing apparatus.

Further information: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

6. Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Use personal protective equipment.
Deny access to unprotected persons.

6.2. Environmental precautions

Environmental precautions: Do not flush into surface water or sanitary sewer system.
If the product contaminates rivers and lakes or drains inform respective authorities.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

6.4. Reference to other sections

For personal protection see section 8.

7. Handling and Storage

7.1. Precautions for safe handling

Advice on safe handling: Avoid exceeding the given occupational exposure limits (see section 8).
Do not get in eyes, on skin, or on clothing. For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Follow standard hygiene measures when handling chemical products

Advice on protection against fire and explosion: Normal measures for preventive fire protection.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink.
When using do not smoke. Wash hands before breaks and at the end of workday.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage

areas and containers:

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully re-sealed and kept upright to prevent leakage. Store in accordance with local regulations.

Storage class (TRGS 510):

6.1C

Further information on

storage stability:

No decomposition if stored and applied as directed.

7.3. Specific end use(s)

Specific use(s):

Consult most current local Product Data Sheet prior to any use.

8. Exposure Controls/Personal Protection

8.1. Control Parameters

Contains no substances with occupational exposure limit values.

8.2. Exposure Controls

Engineering measures

Maintain air concentrations below occupational exposure standards.

Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/face protection: Safety glasses with side-shields conforming to EN166

Eye wash bottle with pure water

Hand protection:

Chemical-resistant, impervious gloves complying with an approved standard must be worn at all times when handling chemical products. Reference number EN 374. Follow manufacturer specifications.

Suitable for short time use or protection against splashes:

Butyl rubber/nitrile rubber gloves (> 0,1 mm) Contaminated gloves should be removed.

Suitable for permanent exposure: Viton gloves (0.4 mm), breakthrough time >30 min.

Skin and body protection:

Protective clothing (e.g. Safety shoes acc. to EN ISO 20345, long-sleeved working clothing, long trousers).

Rubber aprons and protective boots are additionally recommended for mixing and stirring work.

Respiratory protection:

No special measures required.

Environmental exposure controls

General advice:

Do not flush into surface water or sanitary sewer system.

If the product contaminates rivers and lakes or drains inform respective authorities.

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	colourless
Odour:	amine-like
Melting point/ range / Freezing point:	No data available
Boiling point/boiling range:	No data available
Flammability (solid, gas):	No data available
Upper/lower flammability or explosive limits	
Upper explosion limit / Upper flammability limit:	No data available

Lower explosion limit /Lower flammability limit:	No data available
Flash point:	> 100 °C
Method:	closed cup
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
pH:	Not applicable
substance/mixture is non-soluble (in water)	
Viscosity	
Viscosity, kinematic:	> 20,5 mm ² /s (40 °C)
Solubility(ies)	
Water solubility:	insoluble
Partition coefficient: n-octanol/water:	No data available
Vapour pressure:	0,01 hPa
Density:	0,98 g/cm ³ (20 °C)
Relative vapour density:	No data available
Particle characteristics:	No data available

9.2. Other Information

No data available

10. Stability and Reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

The product is chemically stable.

10.3. Possibility of hazardous reactions

Hazardous reactions: Stable under recommended storage conditions.

10.4. Conditions to avoid

Conditions to avoid: No data available

10.5. Incompatible materials

Materials to avoid: No data available

10.6. Hazardous decomposition Products

No decomposition if stored and applied as directed.

11. Toxicological Information

11.1. Information on Toxicological Effects

Acute toxicity

Harmful if swallowed or in contact with skin.

Components:

Polyoxypropylentriamine:

Acute oral toxicity : LD50 Oral (Rat): > 550 mg/kg

Acute toxicity estimate: 550 mg/kg

Method: Calculation method

Acute dermal toxicity: LD50 Dermal (Rabbit): > 1.001 mg/kg

Acute toxicity estimate: 1.001 mg/kg Method:

Calculation method

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

11.2. Information on Other Hazards

Endocrine disrupting properties**Product:**

Assessment: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12. Ecological Information

12.1. Toxicity

No data available

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB

Product:

Assessment: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6. Endocrine disrupting properties

Product:

Assessment: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7. Other adverse effects

Product:

Additional ecological information: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Toxic to aquatic life with long lasting effects.

13. Disposal Considerations

13.1. Waste Treatment Methods

Product: The generation of waste should be avoided or minimized wherever possible.
Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way.
Dispose of surplus and non-recyclable products via a licensed waste disposal contractor.
Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection

and waste disposal legislation and any regional local authority requirements.

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

European Waste Catalogue: 20 01 27* paint, inks, adhesives and resins containing dangerous substances

Contaminated packaging: 15 01 10* packaging containing residues of or contaminated by dangerous substances

14. Transport Information

14.1. UN number or ID number

ADR	: UN 3082
IMDG	: UN 3082
IATA	: UN 3082

14.2. UN proper shipping name

ADR	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Polyoxypropylentriamine)
IMDG	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Polyoxypropylentriamine)
IATA	: Environmentally hazardous substance, liquid, n.o.s. (Polyoxypropylentriamine)

14.3. Transport hazard class(es)

ADR	: 9
IMDG	: 9
IATA	: 9

14.4. Packing group

ADR

Packing group	: III
Classification Code	: M6
Hazard Identification Number	: 90
Labels	: 9
Tunnel restriction code	: (-)
Remarks	: Transport in accordance with special provision 375

IMDG

Packing group	: III
Labels	: 9
EmS Code	: F-A, S-F
Remarks	: Transport in accordance with 2.10.2.7 of the IMDG-Code

IATA (Cargo)

Packing instruction (cargo aircraft)	: 964
Packing instruction (LQ)	: Y964
Packing group	: III
Labels	: Miscellaneous
Remarks	: Transport in accordance with special regulation A 197

IATA (Passenger)

Packing instruction (passenger aircraft)	964
Packing instruction (LQ)	Y964
Packing group	III
Labels	Miscellaneous

14.5. Environmental Hazards

ADR

Environmentally hazardous : yes

IMDG

Marine pollutant : yes

IATA (Passenger)

Environmentally hazardous : yes

IATA (Cargo)

Environmentally hazardous : yes

14.6. Special precautions for the user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet.

Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7. Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

15. Regulatory Information

15.1. Safety, Health And Environmental Regulations / Legislation Specific For The Substance Or Mixture

Relevant EU provisions transposed through retained EU law

UK REACH List of restrictions (Annex 17):

Conditions of restriction for the following entries should be considered:

International Chemical Weapons Convention (CWC) Schedules of Toxic Chemicals and Precursors

: Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer

: Not applicable

GB Export and import of hazardous chemicals - Prior Informed Consent (PIC)

Regulation

: Not applicable

Control of Major Accident Hazards Regulations E2 ENVIRONMENTAL HAZARDS 2015 (COMAH)

Volatile organic compounds: Law on the incentive tax for volatile organic compounds (VOCV)
no VOC duties

Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control) Not applicable

If other regulatory information applies that is not already provided elsewhere in the Safety Data Sheet, then it is described in this subsection.

Health, safety and environmental regulation/legislation specific for the substance or mixture:

Environmental Protection Act 1990 & Subsidiary Regulations Health and Safety at Work Act 1974 & Subsidiary Regulations Control of Substances Hazardous to Health Regulations (COSHH)

May be subject to the Control of Major Accident Hazards Regulations (COMAH), and amendments.

15.2. Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

16. Other Information

Full text of other abbreviations

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS:	Chemical Abstracts Service
DNEL:	Derived no-effect level
EC50:	Half maximal effective concentration
GH:	Globally Harmonized System
IATA:	International Air Transport Association
IMDG:	International Maritime Code for Dangerous Goods
LD50:	Median lethal dosis (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)
LC50:	Median lethal concentration (concentrations of the chemical in air that kills 50% of the test animals during the observation period)
MARPOL:	International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978
OEL:	Occupational Exposure Limit
PBT:	Persistent, bioaccumulative and toxic
PNEC:	Predicted no effect concentration
REACH:	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
SVHC:	Substances of Very High Concern
vPvB:	Very persistent and very bioaccumulative

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text.

End of Safety Data Sheet