

TRICAST 10 & 50 EPOXY RESIN CLEAR PART A

Product Name:	TriCast 10 & 50 Epoxy Resin Clear Part A 1154678 Rev. 4
Revision Date:	24-Oct-2024 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 10 & 50 Epoxy Resin Clear Part A

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

Product Use: Tooling system, Product is not intended for consumer use

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)

Skin irritation, Category 2

Eye irritation, Category 2

Skin sensitisation, Category 1

Reproductive toxicity, Category 1B

Long-term (chronic) aquatic hazard, Category 2

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H317: May cause an allergic skin reaction.

H360F: May damage fertility.

H411: Toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazard Pictograms:



Signal Word: Danger

2.2.1. Hazard Statements

- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H360F May damage fertility.
- H411 Toxic to aquatic life with long lasting effects.

2.2.2. Precautionary Statements

Prevention:

- P201 Obtain special instructions before use.
- P261 Avoid breathing mist or vapours.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

- P308 + P313 IF exposed or concerned: Get medical advice/ attention.
- P391 Collect spillage.

Hazardous components which must be listed on the label:

bis-[4-(2,3-epoxipropoxy)phenyl]propane
 oxirane, mono[(C12-14-alkyloxy)methyl] derivs.
 Pentamethyl piperidylsebacate

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

Not applicable

3.2. Mixtures

Components

Chemical name	CAS-No. EC-No. Registration number	Classification	Concentration (% w/w)
bis-[4-(2,3-epoxipropoxy)phenyl]propane	1675-54-3 216-823-5 01-2119456619-26- XXXX	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317 Aquatic Chronic 2; H411	>= 60 - < 80
		specific concentration limit Eye Irrit. 2; H319 >= 5 %	
		specific concentration limit Skin Irrit. 2; H315 >= 5 %	
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	68609-97-2 271-846-8 01-2119485289-22- XXXX	Skin Irrit. 2; H315 Skin Sens. 1; H317 Repr. 1B; H360F	>= 10 - < 20

Pentamethyl piperidylsebacate Contains: bis(1,2,2,6,6-pentamethyl-4- piperidyl) sebacate methyl 1,2,2,6,6-pentamethyl-4- piperidyl sebacate	1065336-91-5 915-687-0 01-2119491304-40- XXXX	Skin Sens. 1A; H317 Repr. 2; H361f Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 0,025 - < 0,1
		M-Factor (Acute aquatic toxicity): 1 M-Factor (Chronic aquatic toxicity): 1	

For explanation of abbreviations see section 16.

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:	Immediately flush eye(s) with plenty of water. Remove contact lenses. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
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:	Allergic reactions Excessive lachrymation Erythema
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Risks:

Dermatitis

See Section 11 for more detailed information on health effects and symptoms.

Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eye irritation.

May damage fertility.

irritant effects

sensitising effects

toxic effects for reproduction

4.3. Indication of any immediate medical attention and special treatment

Treatment: Treat symptomatically

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.

Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

Smoking, eating and drinking should be prohibited in the application area.

Pregnant women or women of child-bearing age should not be exposed to this product.

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

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters *	Basis *
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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:	slight
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:	> 110 °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:	1,12 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 hazardous decomposition products are known.

11. Toxicological Information

11.1. Information on Toxicological Effects

Acute toxicity

Not classified due to lack of data.

Components:

bis-[4-(2,3-epoxipropoxy)phenyl]propane:

Acute oral toxicity: LD50 Oral (Rat): > 5.000 mg/kg

Acute dermal toxicity: LD50 Dermal (Rabbit): > 5.000 mg/kg

oxirane, mono[(C12-14-alkyloxy)methyl] derivs.:

Acute oral toxicity: LD50 Oral (Rat): > 5.000 mg/kg

Pentamethyl piperidylsebacate:

Acute oral toxicity: LD50 Oral (Rat): 3.230 mg/kg

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

Skin sensitisation

May cause an allergic skin reaction.

Respiratory sensitisation

Not classified due to lack of data.

Germ cell mutagenicity

Not classified due to lack of data.

Carcinogenicity

Not classified due to lack of data.

Reproductive toxicity

May damage fertility.

STOT - single exposure

Not classified due to lack of data.

STOT - repeated exposure

Not classified due to lack of data.

Aspiration toxicity

Not classified due to lack of data.

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

Components:

bis-[4-(2,3-epoxipropoxy)phenyl]propane:

Toxicity to fish: LC50 (Oncorhynchus mykiss (rainbow trout)): 2 mg/l
Exposure time: 96 h

Toxicity to daphnia and other
aquatic invertebrates: EC50 (Daphnia magna (Water flea)): 1,8 mg/l
Exposure time: 48 h

Pentamethyl piperidylsebacate:

Toxicity to fish: LC50 (Fish): 0,97 mg/l
Exposure time: 96 h

M-Factor (Acute aquatic toxicity): 1

M-Factor (Chronic aquatic toxicity): 1

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: In accordance with the EWC Waste Regulation the classification of waste is to be assigned to the jurisdiction of the origin of waste. Therefore, it is not possible to assign a particular waste identification number.

Completely emptied packagings may be given for recycling. Empty packaging may still contain hazardous residues. Empty packaging should be removed by a licensed waste contractor.

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

14.3. Transport hazard class(es)

	Class	Subsidiary risks
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. Specials precautions for 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

International Chemical Weapons Convention (CWC)	: Not applicable
Schedules of Toxic Chemicals and Precursors	

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REACH Information:

All substances contained in our Products are

- registered by our upstream suppliers, and/or
- registered by us, and/or
- excluded from the regulation, and/or
- exempted from the registration.

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)

: Conditions of restriction for the following entries should be considered:
Number on list 3

Number on list 75:

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).

: None of the components are listed
(=> 0.1 %).

REACH - List of substances subject to authorisation (Annex XIV)

: Not applicable

Regulation (EC) on substances that deplete the ozone layer

: Not applicable

Regulation (EU) 2019/1021 on persistent organic pollutants (recast)

: Not applicable

Regulation (EU) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals

: Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

E2	ENVIRONMENTAL HAZARDS
Water hazard class (Germany)	: WGK 2 obviously hazardous to water Classification according to AwSV, Annex 1 (5.2)
Volatile organic compounds	: Law on the incentive tax for volatile organic compounds (VOCV) Volatile organic compounds (VOC) content: 0,05% w/w no VOC duties Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control) Volatile organic compounds (VOC) content: 0,05% w/w

Other regulations:

Take note of Law on the protection of mothers at work, in education and in studies (Maternity Protection Act – MuSchG).

The product is subject to the supply restrictions of the Ordinance on the Prohibition of Chemicals.

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 H-Statements

H315	: Causes skin irritation.
H317	: May cause an allergic skin reaction.
H319	: Causes serious eye irritation.
H360F	: May damage fertility.

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H361f	: Suspected of damaging fertility.
H400	: Very toxic to aquatic life.
H410	: Very toxic to aquatic life with long lasting effects.
H411	: Toxic to aquatic life with long lasting effects.
Full text of other abbreviations	
Aquatic Acute	: Short-term (acute) aquatic hazard
Aquatic Chronic	: Long-term (chronic) aquatic hazard
Eye Irrit.	: Eye irritation
Repr.	: Reproductive toxicity
Skin Irrit.	: Skin irritation
Skin Sens.	: Skin sensitisation
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
GHS	: 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

Further information

Classification of the mixture:

Classification procedure:

Skin Irrit. 2	H315	Calculation method
Eye Irrit. 2	H319	Calculation method
Skin Sens. 1	H317	Calculation method
Repr. 1B	H360F	Calculation method
Aquatic Chronic 2	H411	Calculation method

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