

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Date of last issue: -

Revision Date: 05.02.2021 Version 1.0 Print Date 26.02.2021

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

1.1 Product identifier

Trade name TriCast 10 Epoxy Resin System Part B

1.2 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

Company name of supplier Tricel Composites (GB) Limited, Unit A, Fox Way,

Off Atkinson Street, Leeds, West Yorkshire,

LS10 1PS, United Kingdom.

Telephone +44 (0) 113 270 3133

E-mail address of person responsible for the SDS

sales@tricelcomposites.co.uk

1.4 Emergency telephone number

+44 (0) 113 270 3133 (available during office hours).

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 4 H302: Harmful if swallowed.

Skin corrosion, Sub-category 1B H314: Causes severe skin burns and eye damage.

H318: Causes serious eye damage. Serious eye damage, Category 1 H317: May cause an allergic skin reaction. Skin sensitisation, Category 1

Long-term (chronic) aquatic hazard, Cat-H411: Toxic to aquatic life with long lasting effects.

egory 2

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms







Signal word Danger

Hazard statements H302 Harmful if swallowed.

Causes severe skin burns and eye damage. H314

May cause an allergic skin reaction. H317

Toxic to aquatic life with long lasting effects. H411

Precautionary statements Prevention:

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P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/

eve protection/ face protection.

Response:

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

P304 + P340 + P310 IF INHALED: Remove person to fresh

air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.

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.

Hazardous components which must be listed on the label:

Polyoxypropylentriamine 3-aminomethyl-3,5,5-trimethylcyclohexylamine Adduct IA (epoxy amine adduct)

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.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No.	Classification	Concentration
	EC-No.		(% w/w)
	Registration number		
Polyoxypropylentriamine	39423-51-3	Acute Tox. 4; H302	>= 25 - < 40
	500-105-6	Acute Tox. 4; H312	
	01-2119556886-20-	Eye Dam. 1; H318	
	XXXX	Aquatic Chronic 2;	
		H411	
3-aminomethyl-3,5,5-	2855-13-2	Acute Tox. 4; H302	>= 25 - < 40
trimethylcyclohexylamine	220-666-8	Acute Tox. 4; H312	
	01-2119514687-32-	Skin Corr. 1B; H314	
	XXXX	Skin Sens. 1A; H317	
		Aquatic Chronic 3;	
		H412	
		Eye Dam. 1; H318	

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Adduct IA (epoxy amine adduct)	68609-08-5	Acute Tox. 4; H302	>= 5 - < 10	
, , ,	614-657-1	Skin Sens. 1; H317		
	01-2120106013-80-	Aquatic Chronic 2;		
	XXXX	H411		

For explanation of abbreviations see section 16.

SECTION 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.

Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficul-

Small amounts splashed into eyes can cause irreversible tis-In case of eye contact

sue 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

Allergic reactions

Dermatitis

See Section 11 for more detailed information on health effects

and symptoms.

Risks Health injuries may be delayed.

> corrosive effects sensitising effects

Harmful if swallowed.

May cause an allergic skin reaction. Causes serious eye damage.

Causes severe burns.

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4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media In case of fire, use water/water spray/water jet/carbon diox-

ide/sand/foam/alcohol resistant foam/chemical powder for

extinction.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-

fighting

: Do not allow run-off from fire fighting to enter drains or water

courses.

Hazardous combustion prod- : No hazardous combustion products are known

5.3 Advice for firefighters

for firefighters

Special protective equipment : 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.

SECTION 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.

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SECTION 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 ap-

plication 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 resealed and kept upright to prevent leakage. Store in accord-

ance with local regulations.

Further information on stor-

age stability

: No decomposition if stored and applied as directed.

7.3 Specific end use(s)

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Personal protective equipment

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

Eye wash bottle with pure water

Wear eye/face protection.

Hand protection : Chemical-resistant, impervious gloves complying with an ap-

proved standard must be worn at all times when handling chemical products. Reference number EN 374. Follow manu-

facturer specifications.

Suitable for short time use or protection against splashes:

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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.

Protective clothing (e.g. Safety shoes acc. to EN ISO 20345, Skin and body protection

long-sleeved working clothing, long trousers). Rubber aprons and protective boots are additionally recommended for mixing

and stirring work.

: No special measures required. Respiratory protection

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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state liquid Colour amber Odour amine-like

Odour Threshold No data available

pН Not applicable

Melting point/range / Freezing :

No data available

Boiling point/boiling range No data available

> 100 °C Flash point

Method: closed cup

Evaporation rate No data available

Flammability (solid, gas) No data available

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower : No data available

flammability limit

0,02 hPa Vapour pressure

Relative vapour density No data available

1,00 g/cm3 (20 °C) Density

Solubility(ies)

Water solubility No data available

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Solubility in other solvents : No data available

Partition coefficient: n-

: No data available

octanol/water

Auto-ignition temperature

: No data available

Decomposition temperature

: No data available

Viscosity

Viscosity, dynamic

: No data available

Viscosity, kinematic

: No data available

Explosive properties

: No data available

Oxidizing properties

: No data available

9.2 Other information

No data available

SECTION 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.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Harmful if swallowed.

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Components:

Polyoxypropylentriamine:

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

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

3-aminomethyl-3,5,5-trimethylcyclohexylamine:

Acute oral toxicity : LD50 Oral (Rat): 1.030 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 5,01 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Acute dermal toxicity : LD50 Dermal (Rabbit): > 2.000 mg/kg

Adduct IA (epoxy amine adduct):

Acute oral toxicity : LD50 Oral (Rat, female): 300 - 2.000 mg/kg

Method: OECD Test Guideline 423

Skin corrosion/irritation

Causes severe burns.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitisation

Skin sensitisation

May cause an allergic skin reaction.

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.

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11.2 Information on other hazards

SECTION 12: Ecological information

12.1 Toxicity

Components:

3-aminomethyl-3,5,5-trimethylcyclohexylamine:

Toxicity to algae/aquatic : ErC50 (Desmodesmus subspicatus (green algae)): > 10 - 100

plants mg/l

Exposure time: 72 h

Adduct IA (epoxy amine adduct):

Toxicity to algae/aquatic : EC50 (Pseudokirchneriella subcapitata (algae)): 3,13 mg/l

plants Exposure time: 72 h

Toxicity to fish (Chronic tox- : LC50: 1,62 mg/l

icity) Exposure time: 96 h

Species: Danio rerio (zebra fish)

Toxicity to daphnia and other : EC50: 1,75 mg/l aquatic invertebrates (Chron-Exposure time: 48 h

ic toxicity) Species: Daphnia magna (Water flea)

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 assessment

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

No data available

12.7 Other adverse effects

Product:

Additional ecological infor- : An environmental hazard cannot be excluded in the event of

mation unprofessional handling or disposal.

Toxic to aquatic life with long lasting effects.

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SECTION 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 dan-

gerous substances

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

by dangerous substances

SECTION 14: Transport information

14.1 UN number

 ADR
 : UN 2735

 IMDG
 : UN 2735

 IATA
 : UN 2735

14.2 UN proper shipping name

ADR : POLYAMINES, LIQUID, CORROSIVE, N.O.S.

(3-aminomethyl-3,5,5-trimethylcyclohexylamine)

IMDG : POLYAMINES, LIQUID, CORROSIVE, N.O.S.

(3-aminomethyl-3,5,5-trimethylcyclohexylamine)

IATA : Polyamines, liquid, corrosive, n.o.s.

(3-aminomethyl-3,5,5-trimethylcyclohexylamine)

14.3 Transport hazard class(es)

 ADR
 : 8

 IMDG
 : 8

 IATA
 : 8

14.4 Packing group

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ADR

Packing group : III
Classification Code : C7
Hazard Identification Number : 80
Labels : 8
Tunnel restriction code : (E)

IMDG

Packing group : III
Labels : 8
EmS Code : F-A, S-B

IATA (Cargo)

Packing instruction (cargo : 856

aircraft)

Packing instruction (LQ) : Y841
Packing group : III
Labels : Corrosive

IATA (Passenger)

Packing instruction (passen- : 852

ger aircraft)

Packing instruction (LQ) : Y841
Packing group : III

Labels : Corrosive

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 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 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) Conditions of restriction for the following entries should be considered:

Number on list 3

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International Chemical Weapons Convention (CWC)

Schedules of Toxic Chemicals and Precursors

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

of dangerous chemicals

REACH - Candidate List of Substances of Very High

Concern for Authorisation (Article 59).

REACH - List of substances subject to authorisation

(Annex XIV)

Regulation (EC) No 1005/2009 on substances that de-

plete the ozone layer

Regulation (EU) 2019/1021 on persistent organic pollu- : Not applicable

tants (recast)

REACH Information: All substances contained in our Products are

- registered by our upstream suppliers, and/or

: Not applicable

(=> 0.1 %).

: Not applicable

: Not applicable

Not applicable

None of the components are listed

- registered by us, and/or

- excluded from the regulation, and/or

- exempted from the registration.

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major assistant beyond involving dengarage substances.

jor-accident hazards involving dangerous substances.

E2 ENVIRONMENTAL HAZARDS

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.

SECTION 16: Other information

Full text of H-Statements

H302 : Harmful if swallowed.

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H312 : Harmful in contact with skin.

H314 : Causes severe skin burns and eye damage. H317 : May cause an allergic skin reaction.

H318 : Causes serious eye damage.

H411 : Toxic to aquatic life with long lasting effects.
H412 : Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox. : Acute toxicity

Aquatic Chronic : Long-term (chronic) aquatic hazard

Eye Dam. : Serious eye damage Skin Corr. : Skin corrosion 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:

Acute Tox. 4 H302 Calculation method
Skin Corr. 1B H314 Calculation method
Eye Dam. 1 H318 Calculation method
Skin Sens. 1 H317 Calculation method
Aquatic Chronic 2 H411 Calculation method

The information contained in this Safety Data Sheet corresponds to our level of knowledge at the time of publication. All warranties are excluded. Our most current General Sales Conditions shall apply. Please consult the product data sheet prior to any use and processing.

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Changes as compared to previous version!

GB / EN