

Material safety data sheet (MSDS)

Deep Cast Epoxy Resin

1. Identification of the Substance/ Preparation & Company

Chemical character and proposed application : Epoxy adhesive applications in the construction industry.

Manufacturer : DTECC (pty)Ltd
: Unit 23, 188 Dr Vosloo Rd Bartlett, Boksburg N12
: Industrial Park, Bartlett, Boksburg, 1459
: Telephone +27 79 052 9144

2. Composition/Information about Chemical Ingredients.

Substances presenting a health hazard within the meaning of the Chemical Regulations '93

Name of substance	Conc. % w/w	Symb	R-phrases
DGEBA epoxy resin	>15	Xi,Nn	R36/37/38-43-51/53
Polyamidoamine	>9	Xi,Nn	R36/37/38-43-51/53

For full text of the R-phrases see Section 15 and 16

3. Identification of hazards

Health hazards : Irritant to eyes and skin.
Safety hazards : Non - flammable
Environmental hazards : Toxic to aquatic organisms.

Hazard pictograms



Hazard Statements:

H290 may be corrosive to metals.
H317 May cause allergic skin reaction.
H318 Causes serious eye damage.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H332 Harmful if inhaled.
H341 Suspected of causing genetic defects.

Precautionary statements:

P280 Wear protective gloves/protective clothing/eye protection/face protection. P264 Wash skin and eyes thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P310 Immediately call a poison centre/doctor/physician P351 If in eyes: rinse continuously for several minutes.
P330 Rinse mouth
P501 Dispose of contents and container as instructed in section 13.

4. First Aid measures

Symptoms and effects	: Irritation to the skin and eyes.
First Aid – skin	: Remove contaminated clothing. Wash skin with water and soap. : If persistent irritation occurs, obtain medical attention.
First Aid – eyes	: Flush eyes with water immediately : If persistent irritation occurs, obtain medical attention.
First Aid – ingestion	: Do not induce vomiting, obtain medical attention.

5. Fire fighting measures

Specific hazards	: Not classified as flammable. Fire will produce : dense black smoke giving off Carbon Monoxide.
Extinguishing media	: Foam, water spray, dry chemical powder, CO ² or sand.
Protective equipment	: Full protective clothing and self-contained breathing : apparatus.

Other information : Keep adjacent containers cool by spraying with water.

Flammability of the Product: May be combustible at high temperature. **Auto-Ignition Temperature:** Not available;
Flash Points: OPEN CUP: Not available. **Flammable Limits:** Not available.
Products of Combustion: Not available
Extinguishing media: Carbon Dioxide, dry chemical powder, foam, sand or earth **Not to be used:** Do not use water in a jet

Particular danger provoked by the product or its smoke after case of fire :

Fire will produce dense black smoke, containing hazardous products of combustion. Those products may be a hazard to health.

Particular personal protection:

Appropriate self-contained breathing apparatus may be required. Cool closed containers exposed to fire with water-spray.

6. Accidental release measures

Personal precautions : Avoid contact with skin, eyes and clothing.
Personal protection : Wear protective clothing specified in section 8.
Environmental precautions : Prevent contamination of soil and water.
Clean-up methods : Absorb or contain with sand. Shovel up and place in labelled : sealable containers for safe disposal. Scrub contaminated : surfaces with a detergent solution.

7. Handling and storage

Handling : Avoid contact with skin and eyes.
Storage : Keep in tightly closed containers in a well-ventilated area. Storage temperature : Do not store above 50 °C or below 10 °C.

8. Limits of exposure and personal protection measures

Occupational exposure standard : No specific limits established.
Respiratory protection : Not normally required, in confined spaces wear a half : mask respirator with organic filter cartridge.
Hand protection : Nitrile or butyl rubber gloves.
Eye protection : Safety glasses
Body protection : Standard issue work clothes, chemical resistant boots.

9. Physical and chemical p

roperties

Form : Thin liquid
Colour : Milky white when mixed
Smell : Slight Ammonia

	<u>Value</u>	<u>Unit</u>	<u>Method</u>
Flash point	: >200	°C	DIN 51758
Auto ignition temperature	: >400	°C	DIN 51794
Density at 23 °C	: 1.05	g/ml	DIN 53217
Solubility in water	: Soluble		
pH-Value at 20°C	: n.a.		
Solubility in fat / solvents	: soluble at 20°C (Resin component)		

10. Stability and reactivity

Stability : Stable under normal storage and use conditions.
Conditions to avoid : Reacts exothermically with oxidizing agents such as caustic
: soda, ammonia, amines, alcohols and acids. Avoid high :
temperatures (above 40°C).
Materials to avoid : Strong oxidizing agents and acids.
Hazardous decomposition : Hazardous decomposition substances are not expected to
: form during normal storage. In a fire or at high
: temperatures hazardous decomposition products such as :
CO², CO, smoke, oxides of nitrogen may be produced.

11. Toxicological information

Acute toxicity - oral : LD50 > 2000mg/kg
Acute toxicity – dermal : LD50 > 2000mg/kg
Eye irritation : Irritant
Skin irritation : Irritant
Respiratory irritation : Not irritating
Carcinogenicity : The International Agency for Research on Cancer has concluded
: that DGEPA is not classifiable as to its carcinogenicity.

Routes of Entry: Absorbed through mouth.

Toxicity to Animals: LD50: Not available. LC50: Not available.

Chronic Effects on Humans: Not available.

Other Toxic Effects on Humans: Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects: Skin: May cause skin irritation. Eyes: May cause eye irritation. Ingestion: May cause digestive tract irritation. It is considered a purgative and stimulates smooth muscle of the digestive tract. Inhalation: Mist may cause respiratory tract irritation

12. Ecological information

Degradability : Not readily biodegradable.
 Bioaccumulation : Has the potential to bioaccumulate.
 Acute toxicity : Toxic to aquatic organisms, $1 < LC50 < 10\text{mg/l}$
 Sewage treatment : Toxic to organisms in sewage treatment plants.



13. Guidelines for disposal



Waste disposal : May be incinerated or dispose to a licensed contractor.
 Product disposal : Recover or recycle if possible, incinerate or dispose to a licensed contractor.
 Local legislation : Occupational Health and Safety Act.
 : Hazardous Chemical Substances Regulations Section 15.

14. Transport information

Hazards : Not dangerous for conveyance under UN, IMO and IATA/ICAO codes.
 ADR/RID Class/Item : 9/11(C)
 ADR/RID Symbol : Miscellaneous dangerous substances.
 ADR/RID Kemler Number : 90
 : 3082
 ADR/RID Shipping name : Environmentally Hazardous Substance - Epoxy/Polyamide.

Hardener:

Regulatory information	UN number	Proper shipping name	Class	PG*	Label	Additional information
DOT Classification	UN2735	Amines, liquid, corrosive, n.o.s. (Polyoxypropylenedia mine)	8	III		
TDG Classification	UN2735	Amines, liquid, corrosive, n.o.s. (Polyoxypropylenedia mine)	8	III		

IMDG Class	UN2735	Amines, liquid, corrosive, n.o.s. (Polyoxypropylenedia mine)	8	III		Emergency schedules (EmS) F-A, S-B
IATA-DGR Class	UN2735	Amines, liquid, corrosive, n.o.s. (Polyoxypropylenedia mine)	8	III		Passenger and Cargo Aircraft Quantity limitation: 5 L Packaging instructions: 818 Cargo Aircraft Only Quantity limitation: 60 L Packaging instructions: 820

15. Regulatory information

EC Label name	: Epoxy resin compound
EC Classification	: Irritant, dangerous for the environment.
EC Symbols	: Xi, N
EC Risk phrases	: R36/37/38 Irritant to eyes and skin. : R43 May cause sensitization by skin contact. : R51/53 Toxic to aquatic organisms.
EC Safety phrases	: S24 Avoid contact with skin. : S26 In case of contact with eyes, rinse with plenty of clean water and seek medical advice. : S28 After contact with skin wash with soap and water. : S37/39 Wear suitable gloves and eye/face protection. : S61 Avoid release in to the environment.
EC Annex 1 number	: 603-074-00-8
National legislation	: Occupational Health and safety Act. : Hazardous Chemical Substances Regulations.

16. Other information

Other information: None
References: None
Date of last revision: 10 May 2022

The information in this safety data sheet is provided in accordance with the National Chemical Regulations and EU-Directives. The product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant laws are complied with. The information contained in this sheet are based on the present state of knowledge and current national legislation. It provides guidance on health, safety and environment aspects and should not be construed as any guarantee of technical performance or suitability for application. This material safety data sheet (MSDS) is to the best of our knowledge DTECC (pty)Ltd does not take any responsibility for any and all damage, property damage, injury and death due to misuse of any and all products sold by DTECC (pty)Ltd. By purchasing from DTECC (pty)Ltd the purchaser (You) digitally signs and consent to this material safety data sheet (MSDS) and DO NOT hold DTECC (pty)Ltd and or anyone within the company responsible for anything whatsoever.