SAFETY DATA SHEET

GENERAL PURPOSE EPOXY HARDENER

Compilation date: 08/07/2022

Revision No: 1

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

1.1. Product identifier

Product name: GENERAL PURPOSE EPOXY HARDENER

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

Use of substance / mixture: CURING AGENT

1.3. Details of the supplier of the safety data sheet

Company name: Automotive Bodyfillers Ltd
Unit 4, Millbuck Way
Springvale Industrial Estate
Sandbach
Cheshire
CW11 3HT
Tel: 01270 766685
Fax: 01270 766685
Email: enquiries@resin-supplies.co.uk

1.4. Emergency telephone number

01270 766685 Mon-Fri 9am-5pm only

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: Acute Tox. 4: H302; Skin Corr. 1B: H314; Skin Sens. 1A: H317; Repr. 2: H361fd; Aquatic Chronic 1: H410; -: EUH071

Most important adverse effects: Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Suspected of damaging fertility. Suspected of damaging the unborn child. Very toxic to aquatic life with long lasting effects. Corrosive to the respiratory tract.

2.2. Label elements

Label elements:

Hazard statements: H302: Harmful if swallowed.
H314: Causes severe skin burns and eye damage.
H317: May cause an allergic skin reaction.
H361fd: Suspected of damaging fertility. Suspected of damaging the unborn child.
H410: Very toxic to aquatic life with long lasting effects.
EUH071: Corrosive to the respiratory tract.

Signal words: Danger

Hazard pictograms: GHS05: Corrosion

[cont...]

GHS09: Environmental

GHS08: Health hazard

GHS07: Exclamation mark

Precautionary statements: P201: Obtain special instructions before use.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P281: Use personal protective equipment as required.

P303+361+353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310: Immediately call a POISON CENTER/doctor/.

2.3. Other hazards

Other hazards: Components of the product may affect the nervous system. May cause sensitisation by skin contact. Severe respiratory irritant. Severe skin irritant.

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

BENZYL ALCOHOL

EINECS	CAS	PBT / WEL	CLP Classification	Percent
202-859-9	100-51-6	-	Acute Tox. 4: H332; Acute Tox. 4: H302	10-30%

4-TERT-BUTYLPHENOL

202-679-0	98-54-4	-	Repr. 2: H361f; Skin Irrit. 2: H315; Eye Dam. 1: H318	10-30%

M-PHENYLENEBIS(METHYLAMINE)

216-032-5	1477-55-0	-	-	10-30%

TRIMETHYLHEXANE-1,6-DIAMINE

247-134-8	25620-58-0	-	-	1-10%

[cont...]

NONYLPHENOL

246-672-0	25154-52-3	-	Repr. 2: H361fd; Acute Tox. 4: H302; Skin Corr. 1B: H314; Aquatic Acute 1: H400; Aquatic Chronic 1: H410	10-30%

Contains: POLYAMINE ADDUCT

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning. NOTE TO PHYSICIANS: Application of corticosteroid cream has been effective in treating skin irritation.

Eye contact: Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.

Ingestion: If conscious, give half a litre of water to drink immediately. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Do not induce vomiting. Give 1 cup of water to drink every 10 minutes. Transfer to hospital as soon as possible.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. If conscious, ensure the casualty sits or lies down. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible.

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

Skin contact: If absorbed through the skin, may cause central nervous system effects, such as headache, nausea, dizziness, confusion, breathing difficulties.

Eye contact: Corneal edema can cause the perception of "blue haze" or "fog" around lights, although this is a temporary effect and has no known residual effect. Product vapor can cause glaucopsia (corneal edema) when absorbed into the tissue of the eye from the atmosphere.

Ingestion: May cause central nervous system effects, such as headache, nausea, vomiting, abdominal pain, dizziness, confusion, breathing difficulties. Severe cases of overexposure can result in respiratory failure.

Inhalation: Harmful if inhaled and may cause delayed lung injury. May cause central nervous system effects, such as headache,nausea,dizziness,confusion or breathing difficulties. Severe cases of overexposure can result in respiratory failure. May cause nose,thorat and lung irration. Inhalation of vapors and/or aerosols in high concentration may cause irritation of respiratory system.

[cont...]

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

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Alcohol resistant foam. Carbon dioxide. Dry chemical powder. Dry sand or limestone.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: May generate ammonia gas. May generate toxic nitrogen oxide gases. Use of water may result in the formation of very toxic aqueous solutions. Do not allow run-off from fire fighting to enter drains or water courses. May generate toxic, irritating or flammable combustion products. Incomplete combustion may form carbon monoxide. Ammonia gas may be liberated at high temperatures. In case of incomplete combustion an increased formation of oxides of nitrogen (NOx) is to be expected. May generate carbon monoxide and ammonia gas. A sudden reaction and fire may result if product is mixed with an oxidizing agent. Personnel in vicinity and downwind should be evacuated.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear protective clothing to prevent contact with skin and eyes. Wear self-contained breathing apparatus. A face shield should be worn. Retain expended liquids from fire fighting for later disposal.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Use self-contained breathing apparatus and chemically protective clothing. Wear suitable protecive clothing, gloves and eye/face protection. Evacuate the area immediately. Open enclosed spaces to outside atmosphere.

6.2. Environmental precautions

Environmental precautions: Contain the spillage using bunding. Do not discharge into drains or rivers.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Approach suspected leak areas with caution. Place in appropriate chemical waste container. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Clean up personnel must be equipped with self contained breathing apparatus and butyl rubber protective clothing. Refer to section 13 of SDS for suitable method of disposal.

6.4. Reference to other sections

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Do not use sodium nitrite or other nitrosating agents in formulations containing this

[cont...]

product. Suspected cancer causing nitrosamines could be formed. Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations. Avoid breathing vapors and/or aerosols. Avoid contact with eyes. Ensure there is sufficient ventilation of the area. Avoid contact with eyes or skin. Use only in well-ventilated areas. Use personal protective equipment. Do not eat,drink or smoke.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Do not store near acids. Keep container tightly closed. Store in a cool, well ventilated area. Do not store in reactive metal containers. Keep from freezing.

Suitable packaging: Do not store in reactive metal containers.

7.3. Specific end use(s)

Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits: No data available.

DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

Engineering measures: Provide readily accessible eye wash stations and safety showers. Provide natural or explosive-proof ventilation adequate to ensure concentrations are kept below exposure limits.

Respiratory protection: Self-contained breathing apparatus must be available in case of emergency.

Hand protection: Neoprene gloves. PVC gloves. Butyl gloves. Nitrile gloves. Impermeable gloves. The breakthrough time of the selected gloves(s) must be greater than the intended use period.

Skin protection: Protective clothing with elasticated cuffs and closed neck. Discard contaminated leather articles. Provide readlily accessible eye wash stations and safety showers. Wash at the end of each workshift and before eating, smoking or using the toilet.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Pale yellow

Odour: Ammoniacal

Oxidising: Non-oxidising (by EC criteria)

Solubility in water: <0.1 g/l

Boiling point/range°C: >200.00

Melting point/range°C: No data

Flash point°C: >100

Part.coeff. n-octanol/water: No data

Autoflammability°C: No data

[cont...]

Vapour pressure: 10.34mmHg

Relative density: 0.99 **pH:** Alkaline

9.2. Other information

Other information: No data available.

Section 10: Stability and reactivity

10.1. Reactivity

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

10.5. Incompatible materials

Materials to avoid: Reactive metals (e.g. sodium, calcium, zinc etc) Materials reactive with hydroxyl compounds. CAUTION ! N-Nitrosamines, many of which are known to be potent carcinogens, may be formed when the product comes in contact with nitrous acid, nitrites or atmospheres with high nitrous oxide concentrations. Mineral acids. Organic Acids (i.e. acetic acid, citric acid etc) Sodium Hypochlorite. Product slowly corrodes copper, aluminium, zinc and galvanized surfaces. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion. Oxidizing agents.

10.6. Hazardous decomposition products

Haz. decomp. products: In case of fire hazardous decomposition products may be produced such as: Carbon Monoxide - Carbon Dioxide(CO^2)-Nitric Acid - Ammonia - Nitrogen Oxides(NOx)-Nitrogen Oxide can react with water vapors to form corrosive nitric acid. - Aldehydes. Nitrosamine. Flammable hydrocarbon fragmants (e.g. acetylene).

Section 11: Toxicological information

11.1. Information on toxicological effects

Toxicity values:

Route	Species	Test	Value	Units
ORL	RAT	LD50	2,951	mg/kg

Hazardous ingredients:

BENZYL ALCOHOL

IVN	RAT	LD50	53	mg/kg

[cont...]

ORL	MUS	LD50	1360	mg/kg
ORL	RAT	LD50	1230	mg/kg

NONYLPHENOL

ORL	MUS	LD50	1231	mg/kg
ORL	RAT	LD50	580	mg/kg

Symptoms / routes of exposure

Skin contact: If absorbed through the skin, may cause central nervous system effects, such as headache, nausea, dizziness, confusion, breathing difficulties.

Eye contact: Corneal edema can cause the perception of "blue haze" or "fog" around lights, although this is a temporary effect and has no known residual effect. Product vapor can cause glaucopsia (corneal edema) when absorbed into the tissue of the eye from the atmosphere.

Ingestion: May cause central nervous system effects, such as headache, nausea, vomiting, abdominal pain, dizziness, confusion, breathing difficulties. Severe cases of overexposure can result in respiratory failure.

Inhalation: Harmful if inhaled and may cause delayed lung injury. May cause central nervous system effects, such as headache,nausea,dizziness,confusion or breathing difficulties. Severe cases of overexposure can result in respiratory failure. May cause nose,thorat and lung irration. Inhalation of vapors and/or aerosols in high concentration may cause irritation of respiratory system.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values: No data available.

12.2. Persistence and degradability

Persistence and degradability: No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential: No data is available on the product itself. Bioaccumulation - components:- Benzyl alcohol - Low bioaccumluation potential. Nonylphenol - Moderate bioaccumulation potential.

12.4. Mobility in soil

Mobility: No data available.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

[cont...]

12.6. Other adverse effects

Other adverse effects: Aquatic toxicity: No data is available on the product itself.

Section 13: Disposal considerations

13.1. Waste treatment methods

Recovery operations: Waste from residues/unused : Contact supplier if guidance is required.

Disposal of packaging: Dispose of container and unused contents in accordance with federal,state and local requirements

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

14.1. UN number

UN number: UN2735

14.2. UN proper shipping name

Shipping name: AMINES,LIQUID,CORROSIVE, N.O.S.,(BENZENE-1,3-DIMETHANEAMINE (MXDA),TRIMETHYLHEXANE-1,5-DIAMINE)

14.3. Transport hazard class(es)

Transport class: 8

14.4. Packing group

Packing group: II

14.5. Environmental hazards

Environmentally hazardous: Yes **Marine pollutant:** Yes

14.6. Special precautions for user

Tunnel code: (E)

Section 15: Regulatory information

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

15.2. Chemical Safety Assessment

Section 16: Other information

Other information

Other information: USA - TSCA : Included on Inventory

EU - EINECS : Included on EINECS inventory or polymer substance, monomers included on EINECS inventory or no longer polymer.

Canada - DSL : Included on Inventory

Australia - AICS : Included on Inventory.

[cont...]

Japan - ENCS : Included on Inventory.

South Korea - ECL : Included on Inventory.

China - SEPA : Included on Inventory.

Philippines - PICCS : Included on Inventory.

Phrases used in s.2 and s.3: EUH071: Corrosive to the respiratory tract.

H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H318: Causes serious eye damage.

H332: Harmful if inhaled.

H361f: Suspected of damaging fertility.

H361fd: Suspected of damaging fertility. Suspected of damaging the unborn child.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.