

SAFETY DATA SHEET

Revision: 1.0 Date: 10th May 2017


ACCORDING TO EC-REGULATIONS 1907/2006 (REACH),
1272/2008 (CLP) & 2015/830

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SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

- 1.1 Product identifier**
Product Name RTC-2 Epoxy Part A
Chemical Name Bisphenol A Diglycidyl Ether
CAS No. 25085-99-8
EINECS No. 607-537-5
- 1.2 Relevant identified uses of the substance or mixture and uses advised against**
Identified Use(s) PC14 Metal surface treatment products, including galvanic and electroplating products
Uses Advised Against Anything other than the above.
- 1.3 Details of the supplier of the safety data sheet**
Company Identification VISHAY MEASUREMENTS GROUP UK LTD
Stroudley Road
Basingstoke
Hampshire
RG24 8FW
United Kingdom
Telephone +44 (0) 1256 462131
Fax +44 (0) 1256 471441
E-Mail (competent person) mm.uk@vishaypg.com
- 1.4 Emergency telephone number**
Emergency Phone No. (00-1) 703-527-3887 CHEMTREC (24 hours)
Languages spoken All official European languages.

SECTION 2: HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture**
- 2.1.1 Regulation (EC) No. 1272/2008 (CLP)**
Skin Irrit. 2; H315
Skin Sens. 1; H317
Eye Irrit. 2; H319
Aquatic Chronic 2; H411
- 2.2 Label elements**
Product Name RTC-2 Epoxy Part A
Hazard Pictogram(s)

- Signal Word(s) Warning
- Hazard Statement(s)
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H411: Toxic to aquatic life with long lasting effects.
- Precautionary Statement(s)
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352: IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.

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Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313: If eye irritation persists: Get medical advice/attention.
P391: Collect spillage.

2.3 Other hazards None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances Not applicable

Chemical identity of the substance	%W/W	CAS No.	EC No.	REACH Registration No.
Bisphenol A Diglycidyl Ether	100	25085-99-8	607-537-5	Not yet assigned in the supply chain

SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Self-protection of the first aider

Use personal protective equipment as required. Wear appropriate personal protective equipment, avoid direct contact. Ensure adequate ventilation. Avoid breathing vapours. Avoid contact with skin and eyes. Contaminated clothing should be laundered before reuse.

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms occur obtain medical attention.

Skin Contact

IF ON SKIN: Remove contaminated clothing immediately and wash affected skin with soap and water. Wash contaminated clothing before reuse. If irritation develops and persists, get medical attention.

Eye Contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye. Get medical attention if eye irritation develops or persists.

Ingestion

Unlikely route of exposure. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. If symptoms occur obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Causes irritation to eyes and skin. May cause sensitization by skin contact.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media
Unsuitable extinguishing Media

Extinguish with carbon dioxide, dry chemical, foam or waterspray.
Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Not flammable. May decompose in a fire giving off toxic fumes. Epoxy resins release phenolics, carbon monoxide, and water.

5.3 Advice for fire-fighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Avoid run off to waterways and sewers.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Do not breathe fumes/vapour from heated product. Stop leak if safe to do so. Use personal protective equipment as required. See Section: 8. Avoid breathing vapours. Avoid contact with skin and eyes.

6.2 Environmental precautions

Avoid release to the environment. Do not allow to enter drains, sewers or

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6.3	Methods and material for containment and cleaning up	watercourses. Contain spillages. Adsorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a container for disposal. Dispose of this material and its container as hazardous waste. Residual resin may be removed using steam or hot soapy water.
6.4	Reference to other sections	See Section: 8, 13

SECTION 7: HANDLING AND STORAGE

7.1	Precautions for safe handling	Ensure operatives are trained to minimise exposures. Ensure adequate ventilation. Do not breathe fumes/vapour from heated product. Avoid breathing vapours. In case of inadequate ventilation wear respiratory protection. Wear protective gloves/protective clothing/eye protection/face protection. Avoid contact with skin and eyes. Do not eat, drink or smoke when using this product.
7.2	Conditions for safe storage, including any incompatibilities Storage temperature Storage life Incompatible materials	Keep only in original container. Keep container tightly closed and in a well-ventilated place. Keep away from naked flames and hot surfaces. Ambient. Stable under normal conditions. None known.
7.3	Specific end use(s)	See Section: 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1	Control parameters	
8.1.1	Occupational Exposure Limits	Not established.
8.1.2	Biological limit value	Not established.
8.1.3	PNECs and DNELs	Not established.
8.2	Exposure controls	
8.2.1	Appropriate engineering controls	Ensure operatives are trained to minimise exposures. Ensure adequate ventilation.
8.2.2	Individual protection measures, such as personal protective equipment (PPE)	General hygiene measures for the handling of chemicals are applicable. Keep good industrial hygiene. Avoid contact with skin and eyes. Do not breathe fumes/vapour from heated product. Avoid breathing vapours. Wash hands before breaks and after work. Keep work clothes separately. Do not eat, drink or smoke at the work place. IF exposed: Flush with fresh water if contact with skin or eyes.

Eye/face protection



Wear protective eye glasses for protection against liquid splashes. Wear eye protection with side protection (EN166).

Skin protection



Wear suitable chemical resistant protective gloves for frequent or prolonged operations tested to EN374 with an acceptable permeation test. Contaminated gloves should be carefully rinsed with water before reuse. Breakthrough time of the glove material: refer to the information provided by the gloves' producer.

Respiratory protection



Normally no personal respiratory protection is necessary. In case of inadequate ventilation wear respiratory protection.

Thermal hazards

Not applicable

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8.2.3 Environmental Exposure Controls

Avoid release to the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Colourless to yellowish liquid.
Odour	Faint Epoxy Odour
Odour threshold	Not available.
pH	Not established.
Melting point/freezing point	Not established.
Initial boiling point and boiling range	Not applicable.
Flash point	252°C (Method: PMCC)
Evaporation rate	Not known.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not applicable.
Vapour pressure	Not applicable.
Vapour density	Not applicable.
Relative density	1.16 (H ₂ O=1)
Solubility(ies)	Insoluble in water.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition Temperature	Not available.
Viscosity	Not available.
Explosive properties	Not available.
Oxidising properties	Not oxidising.

9.2 Other information

None.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	Stable under normal conditions.
10.2 Chemical stability	Stable under normal conditions.
10.3 Possibility of hazardous reactions	Phenolics, Carbon monoxide and Water.
10.4 Conditions to avoid	Temperature > 300°C. Decomposes at temperatures above (°C): 350. Generation of gas during decomposition can cause pressure in closed systems. Pressure buildup can be rapid.
10.5 Incompatible materials	Alkalis (strong bases). Acids. Amines and Oxidizing agents.
10.6 Hazardous decomposition product(s)	Will not occur by itself, but masses of more than 500 grams of product plus an aliphatic amine will cause irreversible polymerization with considerable heat buildup.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects	All test data taken from existing ECHA registrations for the substances mentioned.
Acute toxicity - Ingestion	Based upon the available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: Estimated LC50 > 2000 mg/kg bw/day.
Acute toxicity - Inhalation	Based upon the available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: Estimated LC50 >20.0 mg/l.
Acute toxicity - Skin Contact	Based upon the available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: Estimated LC50 > 2000 mg/kg bw/day.
Skin corrosion/irritation	Skin Irrit. 2; Causes skin irritation. Test Result: Irritating to skin. (Jolanki R et al, 1986)
Serious eye damage/irritation	Eye Irrit. 2; Causes serious eye irritation. Test Result: Causes serious eye irritation. (EPA/OTS; Doc #878212416)
Respiratory or skin sensitization	Skin Sens. 1; May cause an allergic skin reaction.

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		Test Result: Skin sensitisation has been reported in studies with guinea pigs. (EPA/OTS; Doc #878212421)
	Germ cell mutagenicity	Based upon the available data, the classification criteria are not met.
	Carcinogenicity	Based upon the available data, the classification criteria are not met.
	Reproductive toxicity	Based upon the available data, the classification criteria are not met.
	STOT - single exposure	Based upon the available data, the classification criteria are not met.
	STOT - repeated exposure	Based upon the available data, the classification criteria are not met.
	Aspiration hazard	Based upon the available data, the classification criteria are not met.
11.2	Other information	None known.

SECTION 12: ECOLOGICAL INFORMATION

12.1	Toxicity	Aquatic Chronic 2; Toxic to aquatic life with long lasting effects. Estimated Mixture LC50 > 1 to ≤ 10 mg/l (Fish)
12.2	Persistence and degradability	Readily biodegradable.
12.3	Bioaccumulative potential	The product has low potential for bioaccumulation.
12.4	Mobility in soil	The product is predicted to have low mobility in soil.
12.5	Results of PBT and VPVB assessment	Not classified as PBT or vPvB.
12.6	Other adverse effects	None known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1	Waste treatment methods	Dispose of this material and its container as hazardous waste. Send after pre-treatment to a appropriate hazardous waste incinerator facility according to legislation.
13.2	Additional Information	Dispose of contents in accordance with local, state or national legislation.

SECTION 14: TRANSPORT INFORMATION

	ADR/RID	IMDG	IATA/ICAO
14.1	UN number	UN 3077	UN 3077
14.2	UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BISPHENOL A DIGLYCIDYL ETHER)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BISPHENOL A DIGLYCIDYL ETHER)
14.3	Transport hazard class(es)	9	9
14.4	Packing group	III	III
14.5	Environmental hazards	Environmentally hazardous substance	Classified as a Marine Pollutant. Environmentally hazardous substance
14.6	Special precautions for user	See Section: 2	
14.7	Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable	

SECTION 15: REGULATORY INFORMATION

15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture	
15.1.1	EU regulations	
	Authorisations and/or Restrictions On Use	Not restricted
15.1.2	National regulations	None known
15.2	Chemical Safety Assessment	A chemical safety assessment is not required under REACH.

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: Revision: 1.0 - Not applicable

References:

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Existing Safety Data Sheet (SDS) and the Classification and Labelling Inventory for Bisphenol A Diglycidyl Ether (CAS No. 25085-99-8)

Literature References:

1. "Bisphenol A Diglycidyl Ether". In TOXLINE®: Toxic Substances Control Act Test Submissions. ToxPlanet, a division of Timberlake Ventures, Inc. Cornelius, NC. 2017

EU Classification: This Safety Data Sheet was prepared in accordance with EC Regulation (EC) 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830.

LEGEND

LTEL: Long Term Exposure Limit

DNEL: Derived No Effect Level

PBT: PBT: Persistent, Bioaccumulative and Toxic

STEL: Short Term Exposure Limit

PNEC: Predicted No Effect Concentration

vPvB: very Persistent and very Bioaccumulative

Hazard classification / Classification code:

Skin Irrit. 2; Skin corrosion/irritation, Category 2

Skin Sens. 1; Skin Sensitisation, Category 1

Eye Irrit. 2; Eye Irritation, Category 2

Aquatic Chronic 2; Hazardous to the aquatic environment, Chronic ,
Category 2

Hazard Statement(s)

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

H411: Toxic to aquatic life with long lasting effects.

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