Revision: 2.0 Date: 07 February 2017

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



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1	Product identifier		
	Product Name	RTC Epoxy Part A	
	Chemical Name	Bisphenol A Diglycidyl Ether	
	CAS No.	25085-99-8	
	EINECS No.	607-537-5	
.2	Relevant identified uses of the substance or mixture	1	
	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.	
SECT	ION 2: HAZARDS IDENTIFICATION		
	TION 2: HAZARDS IDENTIFICATION Classification of the substance or mixture		
SEC 2.1 2.1.1		Skin Irrit. 2; H315	
2.1	Classification of the substance or mixture	Skin Sens. 1; H317	
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2.1 2.1.1	Classification of the substance or mixture Regulation (EC) No. 1272/2008 (CLP) Label elements Product Name Hazard Pictogram(s) Signal Word(s)	Skin Sens. 1; H317 Eye Irrit. 2; H319 Aquatic Chronic 2; H411 According to Regulation (EC) No. 1272/2008 (CLP) RTC Epoxy Part A  Warning H315: Causes skin irritation. H317: May cause an allergic skin reaction.	
2.1 2.1.1	Classification of the substance or mixture Regulation (EC) No. 1272/2008 (CLP) Label elements Product Name Hazard Pictogram(s) Signal Word(s)	Skin Sens. 1; H317 Eye Irrit. 2; H319 Aquatic Chronic 2; H411 According to Regulation (EC) No. 1272/2008 (CLP) RTC Epoxy Part A V Warning H315: Causes skin irritation. H317: May cause an allergic skin reaction. H319: Causes serious eye irritation.	
2.1 2.1.1	Classification of the substance or mixture Regulation (EC) No. 1272/2008 (CLP) Label elements Product Name Hazard Pictogram(s) Signal Word(s) Hazard Statement(s)	Skin Sens. 1; H317 Eye Irrit. 2; H319 Aquatic Chronic 2; H411 According to Regulation (EC) No. 1272/2008 (CLP) RTC Epoxy Part A Warning H315: Causes skin irritation. H317: May cause an allergic skin reaction. H319: Causes serious eye irritation. H319: Causes serious eye irritation.	
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2.1 2.1.1	Classification of the substance or mixture Regulation (EC) No. 1272/2008 (CLP) Label elements Product Name Hazard Pictogram(s) Signal Word(s) Hazard Statement(s)	<ul> <li>Skin Sens. 1; H317</li> <li>Eye Irrit. 2; H319</li> <li>Aquatic Chronic 2; H411</li> <li>According to Regulation (EC) No. 1272/2008 (CLP)</li> <li>RTC Epoxy Part A</li> <li>Warning</li> <li>H315: Causes skin irritation.</li> <li>H317: May cause an allergic skin reaction.</li> <li>H319: Causes serious eye irritation.</li> <li>H319: Causes serious eye irritation.</li> <li>H411: Toxic to aquatic life with long lasting effects.</li> <li>P273: Avoid release to the environment.</li> <li>P280: Wear protective gloves/protective clothing/eye protection/face protection</li> </ul>	
2.1 2.1.1	Classification of the substance or mixture Regulation (EC) No. 1272/2008 (CLP) Label elements Product Name Hazard Pictogram(s) Signal Word(s) Hazard Statement(s)	Skin Sens. 1; H317 Eye Irrit. 2; H319 Aquatic Chronic 2; H411 According to Regulation (EC) No. 1272/2008 (CLP) RTC Epoxy Part A Warning H315: Causes skin irritation. H317: May cause an allergic skin reaction. H319: Causes serious eye irritation. H319: Causes serious eye irritation. H411: Toxic to aquatic life with long lasting effects. P273: Avoid release to the environment.	

## Revision: 2.0 Date: 07 February 2017

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

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
Dispriendi A Digiyoldyi Ether	100	20000-99-0	007-557-5	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. IF IN EYES:Rinse cautiously with water for several minutes. Remove contact Eye 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 Causes irritation to eyes and skin. May cause sensitization by skin contact. and delayed 4.3 Indication of any immediate medical attention and Treat symptomatically. special treatment needed

### **SECTION 5: FIRE-FIGHTING MEASURES**

5.1	Extinguishing media	
	Suitable Extinguishing Media	Extinguish with carbon dioxide, dry chemical, foam or waterspray.
	Unsuitable extinguishing Media	Do not use water jet.
5.2	Special hazards arising from the substance or	Not flammable. May decompose in a fire giving off toxic fumes. Epoxy resins
	mixture	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

6.2 Environmental precautions

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



## Revision: 2.0 Date: 07 February 2017

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



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6.3 6.4	Methods and material for containment and cleaning up Reference to other sections	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. See Section: 8, 13
SECT	ION 7: HANDLING AND STORAGE	
7.1	Precautions for safe handling Conditions for safe storage, including any incompatibilities Storage temperature Storage life	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. 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.
7.0	Incompatible materials	None known.
7.3	Specific end use(s)	See Section: 1.2.
SECT	ION 8: EXPOSURE CONTROLS/PERSONAL	PROTECTION
8.1 8.1.1	Control parameters 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

Revision: 2.0 Date: 07 February 2017

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

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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 (H2O=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.

#### 9.2 Other information

## SECTION 10: STABILITY AND REACTIVITY

10.1 10.2	Reactivity Chemical stability	Stable under normal conditions. 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 gramms 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.

Revision: 2.0 Date: 07 February 2017

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

MICROE MEASUREMENTS

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Germ cell mutagenicity Carcinogenicity Reproductive toxicity STOT - single exposure STOT - repeated exposure Aspiration hazard Other information

- SECTION 12: ECOLOGICAL INFORMATION
- 12.1 Toxicity

11.2

- 12.2 Persistence and degradability
- 12.3 Bioaccumulative potential
- 12.4 Mobility in soil
- 12.5 Results of PBT and VPVB assessment
- 12.6 Other adverse effects

## SECTION 13: DISPOSAL CONSIDERATIONS

SECTION 14: TRANSPORT INFORMATION

13.1 Waste treatment methods

Dispose of this material and its container as hazardous waste. Send after pretreatment to a appropriate hazardous waste incinerator facility according to legislation.

Test Result: Skin sensitisation has been reported in studies with guinea pigs.

Based upon the available data, the classification criteria are not met. Based upon the available data, the classification criteria are not met.

Based upon the available data, the classification criteria are not met.

Based upon the available data, the classification criteria are not met.

Based upon the available data, the classification criteria are not met.

Based upon the available data, the classification criteria are not met.

Aquatic Chronic 2; Toxic to aquatic life with long lasting effects.

Estimated Mixture LC50 > 1 to  $\leq$  10 mg/l (Fish)

The product has low potential for bioaccumulation.

The product is predicted to have low mobility in soil.

(EPA/OTS; Doc #878212421)

None known.

None known.

Readily biodegradable.

Not classified as PBT or vPvB.

13.2 Additional Information

Dispose of contents in accordance with local, state or national legislation.

14.1 14.2	UN number UN proper shipping name	ADR/RID UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BISPHENOL A DIGLYCIDYL ETHER)	IMDG UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BISPHENOL A DIGLYCIDYL ETHER)	IATA/ICAO UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BISPHENOL A DIGLYCIDYL ETHER)
14.3	Transport hazard class(es)	9	9	9
14.4	Packing group	111	III	111
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.	

Revision: 2.0 Date: 07 February 2017

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

## **SECTION 16: OTHER INFORMATION**

The following sections contain revisions or new statements: New SDS Regulation 2015/830 format, all sections have been updated to include new information. Please review SDS with care.

### **References:**

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

#### Literature References:

 "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

### 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 STEL: Short Term Exposure Limit PNEC: Predicted No Effect Concentration vPvB: very Persistent and very Bioaccumulative

## 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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