

SAFETY DATA SHEET

Revision: 2.0 Date: 14.07.2015



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

www.vishaypg.com

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

- 1.1 Product identifier**
Product Name: RTC Epoxy Part B
Chemical Name: Mixture
CAS No.: Mixture
EINECS No.: Mixture
REACH Registration No.: None assigned.
- 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: None known.
- 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**
(00-1) 703-527-3887
CHEMTREC

2. 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
STOT SE 3; H335
Aquatic Chronic 2; H411
- 2.2 Label elements**
Product Name: RTC Epoxy Part B
Regulation (EC) No. 1272/2008 (CLP)
- Hazard Pictogram(s):


- Signal Word(s): Warning
- Contains: Liquid Diethoxymethane Polysulfide Polymer, Tris-2,4,6-(Dimethylaminomethyl) and Bis(dimethylaminomethyl)phenol
- Hazard Statement(s):
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H335: May cause respiratory irritation.
H411: Toxic to aquatic life with long lasting effects.
- Precautionary Statement(s): P261: Avoid breathing vapours.

SAFETY DATA SHEET

Revision: 2.0 Date: 14.07.2015

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

www.vishaypg.com

P280: Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352: IF ON SKIN: Wash with plenty of water.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313: If eye irritation persists: Get medical advice/attention.

Additional Information

None.

2.3 Other hazards

None.

3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Regulation (EC) No. 1272/2008 (CLP)

Chemical identity of the substance	%W/W	CAS No.	EC No.	REACH Registration No.	Hazard Statement(s)
Liquid Diethoxymethane Polysulfide Polymer	< 100	68611-50-7	-	None assigned.	Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335 Aquatic Chronic 2; H411
Tris-2,4,6- (Dimethylaminomethyl)	< 18	90-72-2	202-013-9	None assigned.	Acute Tox. 4; H302 Skin Irrit. 2; H315 Skin Sens. 1; H317 Eye Irrit. 2; H319 Aquatic Chronic 3; H412
Bis(dimethylaminomethyl)phenol	< 3	71074-89-0	275-162-0	None assigned.	Acute Tox. 4; H302 Acute Tox. 4; H312 Skin Corr. 1B; H314 STOT SE 3; H335

H302: Harmful if swallowed. H312: Harmful in contact with skin. H314: Causes severe skin burns and eye damage. 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. H412: Harmful to aquatic life with long lasting effects.

4. SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing. If breathing has stopped, apply artificial respiration. If breathing is laboured, oxygen should be administered by qualified personnel. Call a POISON CENTER/doctor if you feel unwell.

Skin Contact

IF ON SKIN: Remove contaminated clothing and wash all affected areas with plenty of water. Contaminated clothing should be thoroughly cleaned. If skin irritation or rash occurs: Get medical advice/attention.

Eye Contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if eye irritation develops or persists.

Ingestion

IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Do not give anything by mouth to an unconscious person. If the victim is conscious and alert, give 2-4 glasses of water or milk. If symptoms develop, obtain medical attention. If vomiting occurs spontaneously, keep head below hips to prevent aspiration into the lungs. If aspiration is suspected obtain immediate medical attention.

4.2 Most important symptoms and effects, both acute and

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

SAFETY DATA SHEET

Revision: 2.0 Date: 14.07.2015

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

www.vishaypg.com

- | | | |
|------------|---|--|
| 4.3 | Indication of any immediate medical attention and special treatment needed | delayed
irritation. May cause respiratory irritation.
Treat symptomatically.
IF ON SKIN: Cover the affected area with a sterile dressing or clean sheeting and transport for medical care. Do not apply greases or ointments. |
|------------|---|--|

5. SECTION 5: FIREFIGHTING MEASURES

- | | | |
|------------|--|---|
| 5.1 | Extinguishing media
Suitable Extinguishing media

Unsuitable extinguishing media | As appropriate for surrounding fire. Extinguish with carbon dioxide, dry chemical, foam or waterspray.
Do not use water jet. Direct water jet may spread the fire. |
| 5.2 | Special hazards arising from the substance or mixture | May decompose in a fire giving off toxic fumes. Carbon monoxide, carbon dioxide, Nitrogen oxides and Ammonia. |
| 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. |

6. SECTION 6: ACCIDENTAL RELEASE MEASURES

- | | | |
|------------|--|---|
| 6.1 | Personal precautions, protective equipment and emergency procedures | Ensure adequate ventilation. Stop leak if safe to do so. Use personal protective equipment as required. See Section: 8. Avoid breathing vapours. |
| 6.2 | Environmental precautions | Avoid release to the environment. Do not allow to enter drains, sewers or watercourses. |
| 6.3 | Methods and material for containment and cleaning up | Adsorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a container for disposal. Ventilate the area and wash spill site after material pick-up is complete. Dispose of this material and its container as hazardous waste (2008/98/EEC). |
| 6.4 | Reference to other sections | See Section: 8, 13 |

7. SECTION 7: HANDLING AND STORAGE

- | | | |
|------------|--|---|
| 7.1 | Precautions for safe handling | Avoid contact with skin, eyes or clothing. Do not breathe vapour. Do not breathe fumes/vapour from heated product. Ensure adequate ventilation. Use personal protective equipment as required. See Section: 8. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. |
| 7.2 | Conditions for safe storage, including any incompatibilities
Storage temperature
Storage life
Incompatible materials | Keep container tightly closed, in a cool, well ventilated place.

Ambient.
Stable under normal conditions.
Keep away from: Oxidizing agents, Sodium hypochlorite and calcium hypochlorite, Organic acids and Mineral acids. |
| 7.3 | Specific end use(s) | PC14 Metal surface treatment products, including galvanic and electroplating products. |

8. 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 adequate ventilation or use appropriate containment. Guarantee that the eye flushing systems and safety showers are located close to the working place. |
| 8.2.2 | Individual protection measures, such as personal protective equipment (PPE) | General hygiene measures for the handling of chemicals are applicable. Avoid contact with skin, eyes or clothing. Do not breathe vapour. Wash hands before breaks and after work. Keep work clothes separately. Contaminated clothing should be thoroughly cleaned. Do not eat, drink or smoke at the work place. |

SAFETY DATA SHEET

Revision: 2.0 Date: 14.07.2015

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

www.vishaypg.com

Eye/ face protection



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

Skin protection



Hand protection: Wear impervious gloves (EN374). Gloves should be changed regularly to avoid permeation problems. The gloves type used must be chosen based on the work activity and duration as well as concentration/quantity of material being handled. Recommended: Neoprene or Nitrile rubber.

Body protection: Wear impervious protective clothing, including boots, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Respiratory protection



In case of inadequate ventilation wear respiratory protection. Open system(s): Wear suitable respiratory protective equipment.

Thermal hazards

Not applicable.

8.2.3 Environmental Exposure Controls

Avoid release to the environment.

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Straw Yellow Liquid
Odour	Irritating odour
Odour threshold	Not available.
pH	Not established.
Melting point/freezing point	Not established.
Initial boiling point and boiling range	Not applicable.
Flash point	93.3°C
Evaporation rate	Not known.
Flammability (solid, gas)	Not applicable - Liquid.
Upper/lower flammability or explosive limits	Not applicable.
Vapour pressure	Not applicable.
Vapour density	Not applicable.
Relative density	0.97 (H ₂ O=1)
Solubility(ies)	< 20% (Water)
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition Temperature	Not available.
Viscosity	Not available.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

9.2 Other information

None.

10. 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	May react vigorously with oxidizing agents creating explosion hazard.
10.4 Conditions to avoid	Avoid contact with heat and ignition sources and oxidizers.
10.5 Incompatible materials	Keep away from: Oxidizing agents, Sodium hypochlorite and calcium hydrochlorite, Organic acids and Mineral acids.
10.6 Hazardous decomposition product(s)	May decompose in a fire giving off toxic fumes. Carbon monoxide, carbon dioxide, Nitrogen oxides and Ammonia.

SAFETY DATA SHEET

Revision: 2.0 Date: 14.07.2015

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

www.vishaypg.com

11. SECTION 11: TOXICOLOGICAL INFORMATION

11.1	Information on toxicological effects (Substances in preparations / mixtures)	
	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.
	Inhalation	Based upon the available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: Estimated LC50 > 20.0 mg/l.
	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.
	Serious eye damage/irritation	Eye Irrit. 2: Causes serious eye irritation.
	Respiratory or skin sensitization	Skin Sens. 1: May cause an allergic skin reaction.
	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	STOT SE 3: May cause respiratory irritation.
	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.

12. SECTION 12: ECOLOGICAL INFORMATION

12.1	Toxicity	Aquatic Chronic 2: Toxic to aquatic life with long lasting effects. Estimated Mixture LC50 > 1 ≤ 10 mg/l (Fish)
12.2	Persistence and degradability	Part of the components are poorly biodegradable.
12.3	Bioaccumulative potential	The product has no potential for bioaccumulation.
12.4	Mobility in soil	The product has moderate mobility in soil.
12.5	Results of PBT and vPvB assessment	Not classified as PBT or vPvB.
12.6	Other adverse effects	None known.

13. SECTION 13: DISPOSAL CONSIDERATIONS

13.1	Waste treatment methods	Dispose of this material and its container as hazardous waste (2008/98/EEC). 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. Containers of this material may be hazardous when empty since they retain product residue.

14. SECTION 14: TRANSPORT INFORMATION

		ADR/RID / IMDG / IATA
14.1	UN number	UN 3082
14.2	UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (LIQUID POLYSULPHIDE POLYMER)
14.3	Transport hazard class(es)	9
14.4	Packing group	III
14.5	Environmental hazards	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 MARPOL 73/78 and the IBC Code	Not applicable.
14.8	Additional Information	None.

SAFETY DATA SHEET

Revision: 2.0 Date: 14.07.2015

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

www.vishaypg.com

15. SECTION 15: REGULATORY INFORMATION

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- 15.1.1 EU regulations**
- | | |
|---|------|
| Substance(s) of Very High Concern (SVHCs) | None |
| Authorisations and/or Restrictions On Use | None |
- 15.1.2 National regulations**
- | | |
|-----------------------------------|-----------------------|
| Wassergefährdungsklasse (Germany) | Water hazard class: 2 |
|-----------------------------------|-----------------------|
- 15.2 Chemical Safety Assessment**
- | | |
|--|----------------|
| | Not available. |
|--|----------------|

16. SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

References: Existing Safety Data Sheet (SDS), Harmonised Classification(s) for Tris-2,4,6-(Dimethylaminomethyl) (CAS# 90-72-2). Existing ECHA registration(s) for Tris-2,4,6-(Dimethylaminomethyl) (CAS# 90-72-2), and the Classification and Labelling Inventory for Liquid Diethoxymethane Polysulfide Polymer (CAS# 68611-50-7) and Bis(dimethylaminomethyl)phenol (CAS# 71074-89-0).

Classification of the substance or mixture According to Regulation (EC) No. 1272/2008 (CLP)	Classification Procedure
Skin Irrit. 2; H315	Threshold Calculation
Skin Sens. 1; H317	Threshold Calculation
Eye Irrit. 2; H19	Threshold Calculation
STOT SE 3; H335	Threshold Calculation
Aquatic Chronic 2; H411	Summation Calculation

LEGEND

LTEL	Long Term Exposure Limit
STEL	Short Term Exposure Limit
DNEL	Derived No Effect Level
PNEC	Predicted No Effect Concentration
PBT	PBT: Persistent, Bioaccumulative and Toxic
vPvB	very Persistent and very Bioaccumulative

Training advice: Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required.

Disclaimers

Information contained in this publication or as otherwise supplied to Users is believed to be accurate and is given in good faith, but it is for the Users to satisfy themselves of the suitability of the product for their own particular purpose. Vishay Precision Group gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded except to the extent that exclusion is prevented by law. Vishay Precision Group accepts no liability for loss or damage (other than that arising from death or personal injury caused by defective product, if proved), resulting from reliance on this information. Freedom under Patents, Copyright and Designs cannot be assumed.

Annex to the extended Safety Data Sheet (eSDS)

No information available.



Disclaimer

ALL PRODUCTS, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE.

Vishay Precision Group, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "VPG"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product.

The product specifications do not expand or otherwise modify VPG's terms and conditions of purchase, including but not limited to, the warranty expressed therein.

VPG makes no warranty, representation or guarantee other than as set forth in the terms and conditions of purchase. **To the maximum extent permitted by applicable law, VPG disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.**

Information provided in datasheets and/or specifications may vary from actual results in different applications and performance may vary over time. Statements regarding the suitability of products for certain types of applications are based on VPG's knowledge of typical requirements that are often placed on VPG products. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. You should ensure you have the current version of the relevant information by contacting VPG prior to performing installation or use of the product, such as on our website at vpgsensors.com.

No license, express, implied, or otherwise, to any intellectual property rights is granted by this document, or by any conduct of VPG.

The products shown herein are not designed for use in life-saving or life-sustaining applications unless otherwise expressly indicated. Customers using or selling VPG products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify VPG for any damages arising or resulting from such use or sale. Please contact authorized VPG personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.

Copyright Vishay Precision Group, Inc., 2014. All rights reserved.