



|                            |          |
|----------------------------|----------|
| <b>Health</b>              | <b>3</b> |
| <b>Fire</b>                | <b>0</b> |
| <b>Reactivity</b>          | <b>0</b> |
| <b>Personal Protection</b> |          |

## SECTION 1 – MATERIAL IDENTIFICATION

- A) **Trade / Material Name** Two-Component Epoxy Hardener  
 B) **Description** Epoxy Hardener  
 C) **Product Code(s)** RTB-1275-R-B  
 D) **Manufacturer Name** Ronass Chemical Producing Co.  
 E) **Manufacturer Information** #95 Ghaem Magham Avenue, Tehran, Iran  
 Tel: (+98-21) 88307248-9  
 Fax: (+98-21) 88305965  
[www.ronass.com](http://www.ronass.com) | [info@ronass.com](mailto:info@ronass.com)  
 F) **MSDS Preparation Date** July 17, 2018

## SECTION 2 – HAZARDOUS INGREDIENTS

| Name             | Percentage           | Max. Legal Limit     |
|------------------|----------------------|----------------------|
| Organic Solvents | Max. 50% (By Weight) | Max. 50% (By Weight) |
| Active Materials | Max. 50% (By Weight) | N.A.                 |

## SECTION 3 – PHYSICAL DATA

- A) **Appearance and Odor** Coloured Liquid | Light Odor  
 B) **V.O.C.** Max. 50%  
 C) **Viscosity** Max. 57 KU  
 D) **pH Range** 5.5 – 7  
 E) **Water Solubility** No  
 F) **Specific Gravity** 1.03 ± 0.02 gr/cm<sup>3</sup>  
 G) **Flash Point** 28°C  
 H) **Boiling Point** 128°C  
 I) **Melting / Freezing Point** N.A.

## SECTION 4 – STABILITY AND REACTIVITY DATA

**MATERIAL IS STABLE | HAZARDOUS POLYMERIZATION CANNOT OCCUR**

- |  |   |
|--|---|
| A) Chemical Incompatibilities          | Water, oil and inorganic compounds  |
| B) Conditions to Avoid                 | Excessive heat, sparks, open flame, high voltage power lines / switchboards |
| C) Hazardous Decomposition Product(s)  | Carbon Monoxide, Carbon Dioxide, Organic Solvent Vapor                      |
| D) Hazardous Polymerization Product(s) | None  |

## SECTION 5 – LEAK AND DISPOSAL PROCEDURES

- |                                   |   |
|-----------------------------------|---|
| A) Spill and / or Leak Procedures | Contain and collect with absorbent material   |
| B) Waste Management / Disposal    | In accordance with state and provincial regulations   |
| C) Large Spills                   | Remove all sources of ignition; ventilate area; Contain spill with inert absorbent, or mop up |

## SECTION 6 – FIRST AID MEASURES

**THIS PRODUCT IS NOT CONSIDERED A CARCINOGEN BY OSHA, NTP, IARC**

- |   |   |
|---|---|
| A) Summary of Risks                                     | Contact may cause eye irritation; prolonged contact with skin can cause irritation; excessive inhalation can cause dizziness and headache |
| B) Medical Conditions That May Be Aggravated by Contact | Pre-existing disorders of the liver or kidneys, eyes, skin, or respiratory system may be aggravated by exposure to this product           |
| C) Primary Entry Route(s)                               | Eye contact; skin contact; respiratory and ingestion systems  |
| D) Acute Effect(s)                                      | Eye / skin irritation; dizziness; headache and nausea from excessive inhalation   |
| E) Chronic Effect(s)                                    | Aspiration of product into lungs (due to vomiting) can cause chemical pneumonitis, which can be fatal                                     |
| F) Signs and Symptoms of Overexposure                   |   |
| ❖ Eye Contact   | Redness; tearing; blurred vision  |
| ❖ Skin Contact  | Redness; blistering   |
| ❖ Inhalation  | Dizziness; headache   |
| ❖ Ingestion   | Nausea; cramps; diarrhea  |
| G) First Aid  |   |
| ❖ Eye Contact   | Flush with plenty water for 10 minutes; get medical advice  |
| ❖ Skin Contact  | Wash with soap and cool water; seek medical attention if irritation persists  |
| ❖ Inhalation  | Move to an area with fresh air  |
| ❖ Ingestion   | Do not induce vomiting; call a physician immediately for instructions   |

## SECTION 7 – FIRE EXTINGUISHING MEASURES

|                                    |  |
|------------------------------------|--|
| A) Flash Point and Method          | 28°C   |
| B) Autoignition Temperature        | N.A.   |
| C) Flammable Limits in Air         | 12% (LEL) <span style="float: right;">25% (UEL)</span>               |
| D) Extinguishing Media             | Water fog; dry chemical; CO2 foam; sand                              |
| E) Special Firefighting Procedures | Protective equipment and clothing; respirator                        |
| F) Unusual Fire and Explosion      | Do not spray near open flame, hot engines or devices which may spark |

*Lingering vapors given off by the product's aerosol spray may support combustion; adequate ventilation is essential when using this product around potential sources of ignition*

## SECTION 8 – SPECIAL PROTECTION INFORMATION

|                                       |  |
|---------------------------------------|--|
| A) Personal Protective Equipment      |  |
| ❖ Goggles                             | Safety glasses; eye wash station available   |
| ❖ Gloves                              | Rubber Gloves  |
| ❖ Respirator                          | Respirator mask in confined areas or emergency situations  |
| B) Workplace Considerations           |  |
| ❖ Fire Extinguisher                   | Always keep a number of ABC fire extinguishers and sand buckets within the vicinity of the workplace or the storage area |
| ❖ Ventilation                         | Provide sufficient mechanical (general and/or local) ventilation to maintain exposure below TLV                          |
| C) Safety Stations                    |  |
| ❖ Eye Contact                         | Eye wash stations  |
| ❖ Contaminated Equipment and Clothing | Wash before reusing  |

## SECTION 9 – STORAGE AND HANDLING

|                               |  |
|-------------------------------|--|
| A) Storage Conditions         | Keep away from sources capable of igniting product container or packaging; store in well ventilated, cool and dry conditions |
| B) Special Handling / Storage | Handle with care; store indoors  |
| C) Shelf Life                 | At Least 12 Months   |

