



| Health | 3 |
|---------------------|---|
| Fire | 0 |
| Reactivity | 0 |
| Personal Protection | |

SECTION 1 – MATERIAL IDENTIFICATION

Two-Component Epoxy Hardener

- A) Trade / Material Name
- B) Description
- C) Product Code(s)
- D) Manufacturer Name
- E) Manufacturer Information
- Epoxy Hardener 2400-B Ronass Chemical Producing Co. #95 Ghaem Magham Avenue, Tehran, Iran Tel: (+98-21) 88307248-9 Fax: (+98-21) 88305965 www.ronass.com | info@ronass.com July 17, 2018
- F) MSDS Preparation Date

SECTION 2 – HAZARDOUS INGREDIENTS

| Name | |
|------------------|--|
| Organic Solvents | |
| Active Materials | |

Percentage Max. 50% (By Weight) Max. 50% (By Weight) Max. Legal Limit Max. 50% (By Weight) N.A.

SECTION 3 - PHYSICAL DATA

| A) Appearance and Odor | Coloured Liquid Light Odor |
|-----------------------------|------------------------------|
| B) V.O.C. | Max. 45% |
| C) Viscosity | Max. 28 Seconds (ASTM CUP 4) |
| D) pH Range | 5.5 – 7 |
| E) Water Solubility | No |
| F) Specific Gravity | 0.90 ± 0.03 gr/cm3 |
| G) Flash Point | 28°C |
| H) Boiling Point | 110°C |
| I) Melting / Freezing Point | N.A. |

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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)
- D) Hazardous Polymerization Product(s)

SECTION 5 – LEAK AND DISPOSAL PROCEDURES

None

- A) Spill and / or Leak Procedures
- B) Waste Management / Disposal

Contain and collect with absorbent material In accordance with state and provincial regulations

Carbon Monoxide, Carbon Dioxide, Organic Solvent Vapor

C) Large Spills

A) Summary of Risks

Remove all sources of ignition; ventilate area; Contain spill with inert absorbent, or mop up

Contact may cause eye irritation; prolonged contact with skin

SECTION 6 – FIRST AID MEASURES

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

| | | 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 |
| | | |

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SECTION 7 – FIRE EXTINGUISHING MEASURES

| A) Flash Point and Method | 28°C | |
|------------------------------------|--|-----------|
| B) Autoignition Temperature | N.A. | |
| C) Flammable Limits in Air | 12% (LEL) | 25% (UEL) |
| 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) | Per | sonal Protective Equipment | |
|----|-----|--|--|
| | * | Goggles | Safety glasses; eye wash station available |
| | * | Gloves | Rubber Gloves |
| | * | Respirator | Respirator mask in confined areas or emergency situations |
| B) | Wo | rkplace 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) | Saf | ety Stations | |
| | * | Eye Contact | Eye wash stations |
| | * | Contaminated Equipment and Clothing | Wash before reusing |

SECTION 9 – STORAGE AND HANDLING

- A) Storage Conditions
- B) Special Handling / Storage
- C) Shelf Life

Keep away from sources capable of igniting product container or packaging; store in well ventilated, cool and dry conditions Handle with care; store indoors

At Least 12 Months



SECTION 10 – TRANSPORTATION INFORMATION

| A) Shipping Classification | 3.3 |
|----------------------------|-----------------------|
| B) WHMIS Classification | С |
| C) UN Number | 1866 |
| D) Packaging | 1 L (Metal Container) |

THIS PRODUCT MSDS PROVIDES HEALTH AND SAFETY INFORMATION. THE PRODUCT IS TO BE USED IN APPLICATIONS CONSISTENT WITH COMPANY LITERATURE AND PRODUCT DIRECTIONS. INDIVIDUALS HANDLING THIS PRODUCT SHOULD HAVE ACCESS TO THIS INFORMATION. FOR ANY OTHER USES, EXPOSURES SHOULD BE EVALUATED SO THAT APPROPRIATE HANDLING PRACTICES AND TRAINING PROGRAMS CAN BE ESTABLISHED TO ENSURE SAFE WORKPLACE OPERATIONS. PLEASE CONTACT RONASS CHEMICAL PRODUCING CO. FOR FURTHER INFORMATION.

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