



|                            |          |
|----------------------------|----------|
| <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

|                                    |  |
|------------------------------------|--|
| <b>A) Trade / Material Name</b>    | Heat-resistant coating   |
| <b>B) Description</b>              | Intermediate and finish coat for protection of metal surfaces such as cracking plants, rotary kilns and steel structures which are subjected to high thermal stresses up to 600°C                        |
| <b>C) Product Code(s)</b>          | RTB-910  |
| <b>D) Manufacturer Name</b>        | Ronass Chemical Producing Co.  |
| <b>E) Manufacturer Information</b> | #95 Ghaem Magham Avenue, Tehran, Iran<br>Tel: (+98-21) 88307248-9<br>Fax: (+98-21) 88305965<br><a href="http://www.ronass.com">www.ronass.com</a>   <a href="mailto:info@ronass.com">info@ronass.com</a> |
| <b>F) MSDS Preparation Date</b>    | July 17, 2018  |

## SECTION 2 – HAZARDOUS INGREDIENTS

| Name             | Percentage           | Max. Legal Limit |
|------------------|----------------------|------------------|
| Organic Solvents | Max. 31% (By Weight) | N.A.             |
| Total Pigments   | Max. 42% (By Weight) | N.A.             |
| Solid Resins     | Max. 30% (By Weight) | N.A.             |

## SECTION 3 – PHYSICAL DATA

|                                    |                                |
|------------------------------------|--------------------------------|
| <b>A) Appearance and Odor</b>      | Coloured Liquid   Light Odor   |
| <b>B) V.O.C.</b>                   | Max. 25%                       |
| <b>C) Viscosity</b>                | Max. 90 Seconds (ASTM Cup 4)   |
| <b>D) pH Range</b>                 | 5.8 – 7                        |
| <b>E) Water Solubility</b>         | No                             |
| <b>F) Specific Gravity</b>         | 1.45 ± 0.10 gr/cm <sup>3</sup> |
| <b>G) Flash Point</b>              | 28°C                           |
| <b>H) Boiling Point</b>            | ≥ 130°C                        |
| <b>I) Melting / Freezing Point</b> | 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 and 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 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 materials; store in well ventilated, cool and dry conditions |
| B) Special Handling / Storage | Handle with care; store indoors  |
| C) Shelf Life                 | At Least 12 Months   |

## SECTION 10 – TRANSPORTATION INFORMATION

- A) Shipping Classification 3.3
- B) WHMIS Classification C
- C) UN Number 1866
- D) Packaging 6 L (Metal Container) | 20 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.**