

SAFETY DATA SHEET

SECTION 1. IDENTIFICATION

Product Name: Concrete Retard Coat for Horizontal Surfaces

Other Means of Identification: IM R-H-20

Recommended Product Use: As surface retarder, when sprayed on fresh soft concrete will retard the cement and expose the aggregate to produce a three dimensional surface.

Restrictions on Use: None known

Manufacturer/Importer/Supplier/Distributor Information:

Company: Con-Spec Industries Ltd.
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Edmonton, Alberta T6E 0G2
Contact: Robert Lummerding
Telephone: 1 (780) 437-6136
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E-Mail: conspec@shaw.ca

SECTION 2. HAZARD(S) IDENTIFICATION

Classification: Not classified as hazardous according to the criteria of the Globally Harmonized System of Classification and labelling of Chemicals (GHS).

Label Elements:

Signal Word: None

Hazard Statement: None

Hazards Not Otherwise Classified: Not Applicable

0% of the mixture consists of ingredient(s) of unknown toxicity

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SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Mixtures:

| Chemical Identity | CAS Number | Content in Percent (%)* |
|-------------------|------------|-------------------------|
| Water | 7732-18-5 | 80-84 |
| D-Saccharose | 57-50-1 | 10-15 |
| 1,2-Propanediol | 57-55-6 | 1-5 |

Composition comments: *All concentrations are percent by weight unless ingredient is a gas.
Gas concentrations are in percent by volume.

SECTION 4. FIRST-AID MEASURES

General Advise: In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

Inhalation: Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

Skin Contact: Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.

Eye Contact: Immediately flush eyes with plenty of cool water for at least 20 minutes, occasionally lifting the eye lids to ensure thorough rinsing. Get medical attention if irritation persists.

Ingestion: Unlikely to cause adverse effects. If ingested in large amounts and symptoms develop seek medical attention.

Most Important Symptoms/Effects, Acute and Delayed:

Aside from the information found under Description of First Aid Measures (above) and indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

Note to physicians: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

Immediate Medical Attention and Special Treatment:

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

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SECTION 5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Use alcohol resistant foam, dry chemical, or carbon dioxide or water fog.

Unsuitable Extinguishing Media: Do not use a solid water stream as it may scatter and spread fire.

Specific Hazards Arising from the Chemical

Hazardous combustion products: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and /or irritating. Combustion products may include and are not limited to: carbon monoxide, carbon dioxide.

Unusual fire and explosion hazards: Container may rupture from gas generation in a fire situation. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids.

Special Precautions for Firefighters:

Keep people away. Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of re-ignition has passed. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. Burning liquids may be extinguished by dilution with water. Do not use direct water stream. May spread fire. Move container from fire area if this is possible without hazard. Burning liquids may be moved by flushing with water to protect personnel and minimize property.

Special protective equipment for fire-fighters:

Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location of safe.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures: Use appropriate safety equipment. Keep unnecessary and unprotected personnel from entering the area. Keep personnel out of low areas.

Methods and Material for Containment and Cleaning Up: Contain spilled material if possible. Small spills: any absorbent material. Collect in suitable and properly labelled open containers. Wash the spill site with large quantities of water. Large spills: Dike area to contain spill. Pump into suitable and properly labelled container.

Further accidental release

Measures: Environmental precautions: Prevent from entering into soil, ditches, sewers, waterways and /or groundwater.

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SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling: Handle in accordance with good industrial hygiene and safety practices. Wear personal protective equipment. Product handled hot may require additional ventilation or local exhaust. Spills of these organic material on hot fibrous insulations may lead to lowering of the auto ignition temperatures possibly resulting in spontaneous combustion.

Conditions for Safe Storage, Including any Incompatibilities: Store away from direct sunlight or ultraviolet light. Keep container tightly closed when not in use. Store in a dry place. Protect from atmospheric moisture. Store in the following materials: Stainless steel, Aluminium, container lined with phenolic or epoxy-phenolic, FDA food contact approved Coating, or an opaque HDPE plastic container.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters

Occupational Exposure Limits Exposure limits are listed below, if they exist.

| Chemical Name | Type | Exposure Limit Values | Source |
|---------------|------|--|-----------|
| D-Saccharose | TWA | 10 mg/m ³ | ACGIH TLV |
| D-Saccharose | TWA | 10 mg/m ³ (Total Dust) | OSHA PEL |
| D-Saccharose | TWA | 5 mg/m ³ (Respirable Dust) | OSHA PEL |

Consult local authorities for provincial or state exposure limits.

ACGIH® = American Conference of Governmental Industrial Hygienists. TLV® = Threshold Limit Value.

TWA = Time-Weighted Average. STEL = Short-term Exposure Limit. A4 = Not classifiable as a human carcinogen.

OSHA = US Occupational Safety and Health Administration. PEL = Permissible Exposure Limits.

OEL = Occupational Exposure Limits. REL: Recommended Exposure Limit

Appropriate Engineering Controls: Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective.

Individual Protection Measures, such as Personal Protective Equipment

General Information: The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from food, beverages and feed sources. Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work. Do not inhale gases/fumes/dust/ mist/vapour/aerosols. Avoid contact with the eyes and skin.

Eye/Face Protection: Wear appropriate protective glasses or splash goggles as described by 20 CFR1910.133, OSHA eye and face protection regulation, or the European standard EN 166.

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- Skin Protection:** Chemical-resistant gloves and chemical goggles, face-shield and synthetic apron or coveralls should be used to prevent contact with eyes, skin or clothing.
- Respiratory:** A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.
- Environmental exposure controls:** Avoid release to the environment.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|--|-------------------|
| Appearance | |
| Physical State: | Liquid |
| Colour: | Clear blue |
| Odour: | Odourless |
| Odour Threshold: | No data available |
| PH: | 7.5 - 8.5 |
| Melting Point/Freezing Point: | <0°C |
| Initial Boiling Point and Boiling Range: | >100°C |
| Flash Point: | 104°C (219°F) |
| Evaporation Rate: | No data available |
| Flammability (solid, gas): | No data available |
| Upper/Lower Limit on Flammability or Explosive Limits | No data available |
| Vapour Pressure: | No data available |
| Vapour Density: | No data available |
| Specific Gravity: | 1.06 |
| Solubility: | Soluble in Water |
| Auto-ignition Temperature: | >400°C (752°F) |
| Decomposition Temperature: | No data available |
| Viscosity: | No data available |
| VOC Content: | 0 g/l |

SECTION 10. STABILITY AND REACTIVITY

- Reactivity:** Hazardous polymerization will not occur.
- Chemical Stability:** Stable under normal circumstances.
- Possibility of Hazardous Reactions:** Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to Avoid:** No data available.
- Incompatible Materials:** Strong acids, strong bases, strong oxidizing agents.
- Hazardous Decomposition Products:** Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: aldehydes, alcohols, ethers, organic acids.

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SECTION 11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects Acute Dose Effects

Numerical Measures of Toxicity:

Component Analysis - LD50/LC50

| | | | |
|---------------------------|-----------------|---------|-------------|
| 1,2-Propanediol (57-55-6) | Oral LD50 | Rat: | 20000 mg/kg |
| | Dermal LD50 | Rabbit: | 2000 mg/kg |
| | Inhalation LC50 | Rat: | 317 mg/L |
| D-Saccharose (57-50-1) | Oral LD50 | Rat: | 29700 mg/kg |

Irritation / corrosion:

| | |
|-----------------------|-------------------|
| Skin: | Not classified |
| Eye: | Not classified |
| Inhalation: | Not classified |
| Sensitization: | No data available |

Genetic toxicity:

Mutagenicity: No evidence of mutagenic effects

Carcinogenicity: No data available

Reproductive toxicity: No evidence of reproductive effects

STOT - Single Exposure: Not a STOT-SE toxicant

STOT - Repeated Exposure: Based on available data, not expected

Aspiration Hazard: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity: This material may be toxic to aquatic organisms and should be kept out of sewage and drainage systems and all bodies of water. The environmental impact of this product has not been fully investigated.

1,2-Propanediol (57-55-6):

| | | |
|---------------------|--|---|
| Toxicity to algae | EC50 / 72 h NOEC / 96 h or 72 h (M factor) | >19000 mg/L (Pseudokirchneriella subcapitata) |
| Toxicity to fish | LC 50 / 96 h NOEC / 21 days (M factor) | >40613 mg/L (Oncorhynchus mykiss) |
| Toxicity to Daphnia | EC50 / 48 h NOEC / 21 days (M factor) | >18340 mg/L (Daphnia magna) |

Persistence and degradability: Readily biodegradable.

Bioaccumulative potential:

1,2-Propanediol (57-55-6) Log Pow: -1.07 BCF: 0.09 Potential: Low

Mobility in Soil: No further relevant information available.

Other Adverse Effects: No further relevant information available.

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SECTION 13. DISPOSAL CONSIDERATIONS

- Waste Disposal:** The generation of waste should be avoided or minimized wherever possible. Dispose of waste according to local, state/provincial, and federal requirements. Avoid disposal into wastewater treatment facilities.
- Contaminated Materials:** Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
- Container Disposal:** Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

SECTION 14. TRANSPORT INFORMATION

- TDG:** Not regulated as dangerous goods.
- UN Shipping Name:** Not regulated
- Classification:**
- UN:**
- Packing Group:**

SECTION 15. REGULATORY INFORMATION

- WHMIS Classification:** Not regulated

SECTION 16. OTHER INFORMATION

- Revision Date:** January 5, 2017
- Version #:** 1.0

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