Safety Data Sheet  
R-20 Retarder  
Complies with OSHA Hazard Communication 
www.specco.com

SECTION 1. Identification

1.1 Product Identifier:  
Product Name: R-20 Retarder  
Product Code: Formulation JB-104

1.2 Uses of the product:  
Surface Retarder for Concrete Flatwork

1.3 Details of the product manufacturer:  
Supplied By: Specco Industries Inc.  
601 N. 5th Ave.  
Kankakee, Illinois 60901  
(630)-257-5060  
e-Mail: Info@specco.com

1.4 Emergency Telephone Number:  
24 Hour Emergency:  
INFOTRAC: 1-800-535-5053  
Outside U.S. and Canada  
Infotrac: 352-323-3500  
Note: INFOTRAC and National Response Center 
emergency numbers to be used only in the event of 
chemical emergencies involving a spill, leak, fire, 
exposure or accident involving chemicals

SECTION 2. Hazard(s) Identification

2.1*** EMERGENCY OVERVIEW** * OSHA Hazards: Causes eye and skin irritation. Harmful if swallowed. May cause respiratory irritation

2.2 Classification of the substance or mixture:

GHS-US Classification  
Eye irritation-Category 1  
Skin corrosion/irritation - Category 2  
Acute Toxicity-oral-Category 4  
Specific Target Organ Toxicity (Single exposure) - Category 3

2.3 Label elements:

Symbol(s) of Product GHS-US labeling:  
Hazard pictograms (GHS-US):  
Signal Word: DANGER

2.3 Label Elements:  
GHS –US HAZARD STATEMENTS:  
Aspiration hazard, category 1 H302 May be harmful if swallowed  
Skin Irritation, category 2 H315 Causes skin irritation  
Eye damage/irritation , category 1 H318 Causes serious eye damage  
Acute Toxicity-Oral- Category 4 H335 May cause respiratory irritation

GHS –US PRECAUTIONARY STATEMENTS:  
Prevention:
Response:
P305 + P351 + P338  IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P304+P340+P312  If INHALED, remove person to fresh air and keep comfortable for breathing. Call a Poison Control Center/doctor if they feel unwell.
P310  Immediately call a Poison Control Center/doctor
P330  Rinse mouth
P332+P313  If skin irritation occurs. Get medical advice or attention. 
P337 +P313  If eye irritation persists: get medical advice or attention.
P312  If swallowed, call a POISON CENTER/doctor/physician if you feel unwell.
P333 + P313  If skin irritation or rash occurs: get medical advice/attention.
P362 + P364  Take off contaminated clothing and wash it before reuse.

Storage:
P403+P235+P233  Store in a well-ventilated place. Keep Container tightly closed.
P405  Store Locked Up

Disposal:
P501 Dispose of contents/container in accordance with local/regional/national regulations

2.4 Other hazards:
Hazardous decomposition products: None listed

SECTION 3. Composition on Ingredients

3.1 Substances:

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Wt. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water-Non Hazardous</td>
<td>7732-18-5</td>
<td>81%</td>
</tr>
<tr>
<td>Sodium Glucoheptanate</td>
<td>NA</td>
<td>10%</td>
</tr>
<tr>
<td>Sodium Gluconate</td>
<td>NA</td>
<td>3%</td>
</tr>
<tr>
<td>Proprietary Compounds *</td>
<td>NA</td>
<td>&lt;3%</td>
</tr>
<tr>
<td>Methanol</td>
<td>67-56-1</td>
<td>&lt;2%</td>
</tr>
<tr>
<td>Dowsil 75 Preservative</td>
<td>004080-31-3</td>
<td>&lt;0.1%</td>
</tr>
</tbody>
</table>

*Ingredients not listed on this safety data sheet are considered to be non-hazardous according to OSHA 1910.1200 or are not present above their cutoff levels.

SECTION 4. First-Aid Measures

4.1 Description of first aid measures:

**FIRST AID- EYE CONTACT:** Immediately flush eyes with water. Flush eyes with water for a minimum of 15 minutes, occasionally lifting and lowering upper lids. Remove contact lenses if worn If eye irritation persists, obtain medical advice or attention promptly.

**FIRST AID- SKIN CONTACT:** Immediately flush skin with plenty of water. Remove clothing. Get medical attention immediately. Wash clothing separately and clean shoes before reuse.

**FIRST AID- INHALATION:** Remove person to fresh air and keep comfortable breathing. Call a Poison Control center/doctor if they feel unwell. If not breathing, give artificial respiration. Consult a Physician.

**FIRST AID- INGESTION:** If swallowed, do NOT induce vomiting. Give victim a glass of water.
4.2 Principle symptoms and health effects both acute and delayed:

**EYE CONTACT:** May cause eye irritation

**SKIN CONTACT:** Contact with skin may cause mild irritation. Prolonged or repeated contact can result in defatting skin which may result in skin irritation and dermatitis (rash). Personnel with pre-existing skin disorders should avoid contact with this product.

**INHALATION:** Vapors can cause irritation of the respiratory tract. High concentrations can cause headache, nausea, weakness, light headedness, and stupor (CNS depression).

**INGESTION:** This materials may be harmful or fatal if swallowed. Harmful or fatal if liquid is aspirated into the lungs. Irritating to mouth, throat, and stomach. Can be readily absorbed by the stomach and intestinal tract. Symptoms include burning sensation of the mouth and esophagus, nausea, vomiting, diarrhea, dizziness, staggering gait, drowsiness, loss of consciousness and delirium as well as additional central nervous system effects. Swallowing as little as 1-4 ounces of Methanol has been reported to cause death or serious injury such as blindness in humans. Onset of symptoms may be delayed for 18-24 hours. Treatment prior to onset of symptoms may be life saving. Methanol is rapidly absorbed and emesis should be initiated early to be effective, within 30 minutes of ingestion if possible. Administer syrup of ipecac. After the dose is given, encourage patient to take 6-8 ounces of clear, non carbonated fluid. Dose may be repeated if emesis does not occur within 30 minutes. Maintain contact with Poison Control center during all aspects of diagnosis and treatment.

**CHRONIC SYMPTOMS:** None

4.3 Indication of any immediate medical attention and special treatment needed:
No specific actions are required.

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**SECTION 5. Fire-Fighting Measures**

5.1 Extinguishing Media:
**Suitable Extinguishing Media:** Use Carbon Dioxide, Dry Chemical, Foam, Water Fog

**Unsuitable Extinguishing Media:** None Known

5.2 Special hazards arising from the substance or mixture:
**Fire Hazard:** None

**Explosion Hazard:** No -Product is not combustible

**Reactivity:** No hazardous combustion products or hazard reactions are known.

5.3 Advice for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA / NIOSH approved or equivalent) and full protective gear. Evacuate all unnecessary personnel. Water spray to cool containers or protect personnel.

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**SECTION 6. Accidental Release Measures**
6.1 Personal precautions, protective equipment, and emergency procedures

**General:** Wear personal protection equipment (see Section 8). Keep unprotected persons away. Avoid contact with eyes and skin. Avoid inhaling mists and vapors. If material is released indicate risk of slipping.

**Protective Equipment:** Wear protective clothing as appropriate for the work environment, including gloves, and eye/face protection. Use respiratory protection as recommended in Section 8-Exposure controls/personal protection.

**Emergency Procedure:** Collect spilled materials for disposal.

6.2 Environmental precautions:

**Containment:** Prevent material from entering surface waters, drains or sewers and soil. Contain any fluid that runs out using suitable material. Retain contaminated water/extinguishing water. Dispose of in prescribed marked containers. Spills of materials which could reach surface waters must be reported to the United States Coast Guard National Response Center’s toll free phone number (800) 424-8802.

6.3 Methods and material for containment and cleaning up:

Do not flush away with water. For small amounts: Absorb with a liquid binding material such as diatomaceous earth, dry sand, or earth, place in a chemical waste container, and dispose of according to local/state/federal regulations. Do not touch or walk though spilled material. Avoid runoff into storm sewers and ditches which lead to waterways. Ventilate spilled area. Stay upwind of spill. Clean any slippery coating that remains using a detergent/soap solution or another biodegradable cleaner. Exhaust vapors.

6.4 Reference to other Sections:

Refer to Sections 8 and 13 for additional information.

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**SECTION 7. Handling and Storage**

7.1 Precautions for safe handling:

**Work Practices:** Use only in well ventilated places. Avoid breathing vapor, fumes or mist. Avoid contact with eyes, skin, and clothing.

**Hygiene Practices:** Do not eat, drink, or smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities:

K Store containers in a cool, well ventilated place. Keep container closed when not in use. Protect from direct sunlight. Do not let material freeze if possible,

**Static Discharge:** Not applicable

7.3 Specific end use(s):

**Intended Use(s):** Concrete Retarding Liquid

**Prohibited use(s):** None listed
SECTION 8. Exposure Controls/Personal Protection

8.1 Control Parameters:
Ingredients with Occupational Exposure Limit:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH-TLV-TWA</th>
<th>ACGIH-TLV STEL</th>
<th>OSHA PEL-TWA</th>
<th>OSHA PEL-CEILING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methanol</td>
<td>N.E.</td>
<td>N.E.</td>
<td>N.E.</td>
<td>N.E.</td>
</tr>
</tbody>
</table>

8.2 Exposure controls:
8.2.1 Engineering controls:
Minimize the release of fumes or vapors. Use process controls, local exhaust ventilation, or other engineering controls to maintain airborne levels below the limits shown in Section 8.1 above. See also ACGIH Industrial Ventilation-Recommended Practice (latest edition).

8.2.2 Personal protective equipment (PPE):

**RESPIRATORY PROTECTION:** NIOSH/MHSA approved respirators are necessary if airborne concentrations are expected to exceed exposure limits.

**SKIN PROTECTION:** Wear impervious, impermeable gloves such as butyl rubber based to prevent contact with the skin. Wear protective gear as needed such as apron, long sleeved shirts to minimize contact. Wash hands with soap and water after use.

**EYE PROTECTION:** Wear safety glasses with side shields (or goggles) and a face shield

**OTHER PROTECTIVE EQUIPMENT:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

**HYGENIC PRACTICES:** Do not eat or drink in areas where the material is used. Avoid breathing vapors. Remove contaminated clothing and wash before re-use. Wash thoroughly after handling. Wash hands before eating.

SECTION 9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties:

- **Appearance:** Clear, brown liquid
- **Odor:** Pungent
- **Spec. Grav. g/cm3:** 0.948
- **Freeze Point, °F:** N.A.
- **Solubility in Water:** Dilutable
- **Boiling Range, °F:** 100 deg C/212 deg F
- **Evaporation Rate:** N.A.
- **V.O.C.:** 2.45lb./ gal/ 294 g/L
- **Physical State:** Liquid
- **Odor Threshold:** N.D..
- **pH:** Approx. 7.00 +/-0.50
- **Viscosity:** Approx. 40 cps
- **Density:** 7.90 lb. / gal
- **Flash Point, °F:** Not flammable
- **Auto Ignition Temp, °F:** N.A.
- **Vapor Pressure:** N.A.
SECTION 10. Stability and Reactivity

10.1 Reactivity:
None

10.2 Chemical stability:
Stable under normal temperature and pressure

10.3 Possibility of hazardous reactions:
Hazardous reactions or polymerization will not occur.

10.4 Conditions to avoid:
None known

10.5 Incompatible materials:
None Known

10.6 Hazardous decomposition products:
None known

SECTION 11. Toxilogical Information

11.1 Information on Toxilogical Effects: Toxilogical testing has not been conducted with this material.

11.1.1 Acute toxicity: All symptoms of acute toxicity are due to high alkalinity. Material will cause irritation. Oral LD50 (rat) 3400 mg/kg bw.

11.1.2 Skin corrosion/irritation: Can cause skin irritation

11.1.3 Serious eye damage/eye irritation: Depending on concentration or residual monomers (typically less than 0.1%, vapors can collect above the liquid in closed containers. Can cause serious eye irritation.

11.1.4 Respiratory or skin sensitization: Mist is an irritant to the respiratory tract. Inhalation LC50 (rat) >2.06 g/m3.

11.1.5 Germ cell mutagenicity: None

11.1.6 Carcinogenicity: No components of this product are present at levels greater than or equal to 0.1% are identified as carcinogens or possible carcinogens.

11.1.7 Reproductive toxicity: None

11.1.8 Specific target organ toxicity (single exposure): None

11.1.9 Specific target organ toxicity (repeated exposure): None

11.1.10 Aspiration hazard: None

Assessment: For this endpoint, no toxilogical test data is available for this product.

11.1.11: NA

SECTION 12. Ecological Information

12.1 Toxicity
Eco toxicity: None known

12.2 Persistence and degradability
Inorganic. The substance has no potential for bioaccumulation

12.3 Bioaccumulative potential
Inorganic, not known to bio-accumulate.

12.4 Mobility in Soil
Not applicable

12.5 Other adverse effects
None known

SECTION 13. Disposal Considerations

13.1 RCRA Waste Classification
Not known

13.2 Product disposal
Recommended to dispose of according to regulations in a special waste incinerator. Always dispose of any waste in accordance with all local, state, and federal regulations.

13.3 Packaging disposal
Completely discharge containers (no tear drops, no residual contents). Containers may be recycled or be reused. Observe local/state/federal regulations.

SECTION 14. Transport Information

14.1 UN Number:
Not regulated

14.2 UN Proper Shipping Name / IMDG/IATA:
Not applicable/ not classified as a dangerous good

14.3 Transport hazards class:
Not applicable

14.4 Packing Group:
Not applicable

14.5 Environmental hazards:
Not relevant

14.6 Special precautions for user:
No special precautions

SECTION 15. Regulatory Information

15.1 U.S. Federal Regulations:
TSCA No:
This material or its components are listed on or are in compliance with the requirements of the TSCA Chemical Substance Inventory. This material does not contain any TSCA 12(b) regulated chemicals.

SARA SECTION 302: None

SARA SECTION 311/312 Hazard categories: Acute Health Hazard, Delayed Chronic Health Hazard

SARA SECTION 313 (Chemicals)
This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and reauthorization Act of 1986 and 40CFR part 372:

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Chemical:</th>
<th>Upper limit wt %</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

RCRA:
No components are listed under the Resource Conservation and Recovery Act, or its regulations, 40CFR S261 et. Seq.

CERCLA:
Components of this product have been reviewed according to the EPA “Hazard Categories” promulgated under Sections 311 and 312 of the Superfund Amendment and reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:
Fire Hazard, Acute Health Hazard, Chronic Health Hazard

EMERGENCY PLANNING AND COMMUNITY RIGHT TO KNOW ACT:
None listed

CLEAN AIR ACT:
This product does not contain any Class I or Class II ozone depleting substances.

FDA:
No information

NTP:
No information

OSHA:
No information

15.2 U.S, State Regulations:

CALIFORNIA PROPOSITION 65:
This material does not contain any chemicals known to the state of California to cause cancer.

CALIFORNIA PROPOSITION 65 REPRODUCTIVE TOXINS: The following ingredients present in the product are known to the state of California to cause birth defects, or other reproductive hazards.
No Proposition 65 Reproductive toxins exist for this product.: None

MASSACHUSETTS TOXIC USE REDUCTION ACT:
This material contains no listed components

NEW JERSEY RIGHT-TO-KNOW:
This material contains no listed components

PENNSYLVANIA RIGHT-TO-KNOW:
This material contains no listed components
15.3 International regulations:

**CANADIAN WHMIS:**
This product has been classified in accordance with the Hazard criteria of the CPR and the SDS contains all of the information required by the CPR.

**WHMIS Class:** Class D2B (Toxic) Symbol: Stylized T

**DSL Status:** This material or one or more of its components is not listed on the Canadian Domestic Substances List.

**EUROPEAN UNION:**
No Information

**IARC:**
No information

15.4 Other Regulations
National, state, provincial or local emergency planning, community right to know or other laws, regulations or ordinances may be applicable-consult applicable national, state, provincial or local laws.

**SECTION 16. Other Information**

Revision Date: 02-09-15  
Supersedes Date: New SDS

**S.D.S. produced by:** Specco Regulatory Department in accordance with the requirements outlined in the Federal Register, Volume 77, NO.58, March 2012 page 17574. In this final rule, OSHA modified its Hazard Communication Standard (HCS) to conform to the United Nation’s Globally Harmonized System of Classification and Labeling of Chemicals (GHS). The modifications to the standard included but were not limited to revised criteria for classification of chemical hazards and a new specified format for Safety Data Sheets.

Standardized American System for the identification of hazards presented by this product in view of emergency procedures (NFPA 704) - H.M.I.S. Ratings:

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>0</td>
<td>0</td>
<td>G</td>
</tr>
</tbody>
</table>

Regarding Volatile Organic Compounds, gram/liter: N.A. (0)

DISCLAIMER: THE VOLATILE ORGANIC COMPOUND (V.O.C.) CONTENT REPORTED HEREIN, IF ANY, IS BASED ON A MATERIAL V.O.C. CALCULATION. NOTE THAT SEVERAL METHODS ARE USED FOR CALCULATING V.O.C. CONTENT AND THAT STANDARDS/REQUIREMENTS REGARDING V.O.C. CONTENT VARY BY LOCATION/JURISDICTION. ACCORDINGLY, SPECCO MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESSED OR IMPLIED, REGARDING THIS MATERIAL’S COMPLIANCE WITH V.O.C. STANDARDS/REQUIREMENTS APPLICABLE IN LOCATIONS/JURISDICTIONS WHERE THIS MATERIAL MAY BE SOLD OR USED.

**Text for GHS Hazard Statements shown in section 3 describing each ingredient:**

H315  Causes skin irritation  
H319  Causes eye irritation

**Icons for GHS Pictograms shown in Section 3 describing each ingredient:**

![GHS07 Icon]

The information on this SDS was obtained from sources which we believe to be reliable. However, the information provided is without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the product itself. The information and recommendations are offered for the user's consideration and examination and should be used to make an independent determination of the methods to safeguard workers and the environment. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For these reasons we do not assume responsibility and expressly disclaim any liability from loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. It is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.