SAFETY DATA SHEET

SECTION 1 IDENTIFICATION

PRODUCT

Product Identifier: Bruce’s GSR
Intended Product Use: Mineral stain and grime removal from hard surfaces
Manufacturer Identification Code: 6240

MANUFACTURER

Chemical Technologies International Inc.
P.O. Box 968
Rancho Cordova, CA 95741 USA
Phone: (916) 638-1315 Fax: (916) 638-0712
24 hours Emergency Assistance Calls (USA): CHEMTREC (800) 424-9300
Please reference name and manufacturers identification number

SECTION 2 HAZARD(S) IDENTIFICATION

GHS Classification

Acute Dermal Toxicity (Category 4)

Routes of Exposure: Eye contact, skin contact, Inhalation, and ingestion.
Inhalation: Unlikely to occur when used as directed. Excessive inhalation of dust may cause irritation of the respiratory tract.
Eye Contact: Can irritate eyes
Skin Contact: Repeated exposure may cause skin irritation, drying, chapping.
Ingestion: Harmful if swallowed can cause gastrointestinal irritation; including but limited to nausea, vomiting and Diarrhea.
Carcinogenic Potential: See Section 11.
Acute Effects: This product is considered to be a potential irritant. This product should not be used for any other purpose than the intended use in section 1.
Chronic Effects: Not established.

Health hazard 1
Flammability hazard 0
Reactivity hazard 0
Other hazard

Signal word: CAUTION
Hazard statement(s): H312: Harmful in contact with skin.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>CAS #</th>
<th>CONCENTRATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Alumina Silicate</td>
<td>12141-46-7</td>
<td>10-30%</td>
</tr>
<tr>
<td>2. Tallow</td>
<td>61789-99-9</td>
<td>5-25%</td>
</tr>
<tr>
<td>3. Sodium Hydroxide</td>
<td>1310-73-2</td>
<td>1-20%</td>
</tr>
</tbody>
</table>

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SECTION 4  FIRST-AID MEASURES

Inhalation: Remove from further exposure to fresh air. If respiratory irritation, dizziness, or nausea occurs seek immediate medical attention.

Eye Contact: Flush eyes with a directed stream of water for 15 minutes, forcibly holding eyelids apart to ensure complete irrigation of all eye and lid tissue. Washing eyes immediately after exposure is essential to achieve maximum effectiveness and minimize potential irritation. If irritation persists, seek immediate medical attention.

Skin Contact: Wash contact areas with soap and water. Launder exposed clothing before reuse.

Ingestion: If swallowed, do not induce vomiting. Seek immediate medical attention.

SECTION 5  FIRE-FIGHTING MEASURES

FLAMMABILITY PROPERTIES
  Flashpoint: Non-flammable nor combustible.
  Flammable Limits: Not Available.
  Auto Ignition Temperature: Not Available.

FIREFIGHTING PROCEDURES
  General Hazard: No known general hazards
  Firefighting Instructions: Evacuate all unnecessary personnel. Use dry chemical, CO₂, water, foam or appropriate extinguishing media for fires where water is not appropriate. No special firefighting instructions.
  Firefighting Equipment: Firefighters should wear NICSH/MSHA approved self-contained, positive pressure breathing apparatus and full protective clothing.
  Hazardous Combustion Products: Combustion may release oxides of carbon.
  Unusual Fire and Explosion Hazards: None. This material is considered non-flammable and non-combustible.

SECTION 6  ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS
  Persons performing the clean up should wear personal protective equipment sufficient to keep material away from skin. Avoid direct contact with material. See section 4 for First-Aid Advice. See section 5 for Firefighting Advice.

PROTECTIVE MEASURES
  To minimize exposure to all chemicals, including this product, use good industrial hygiene and common sense. Use only in well ventilated area. If necessary, use exhaust ventilation to insure adequate ventilation. Insure that water is readily available and that you are prepared to properly wash out your eyes should the need arise. (See section 4 for more advice). Wear NIOSH/MSHA approved organic respirator when ventilation is not adequate or when the sufficiency of ventilation to maintain concentrations below exposure limits is in question. Wear chemical safety goggles to protect against splashes or contact with eyes. See OSHA 29 CFR 1910.33

CLEAN-UP PROCEDURES
  Small Spills: Sweep up and dispose of in DOT approved waste container.
  Large Spills: Scoop or sweep up and dispose into DOT approved waste container. If possible complete clean up on a dry basis. Comply with all applicable governmental regulations on spill reporting, handling and disposal of waste. Contain all spills or leaks to prevent discharge into the environment. All spills or releases need to be reported to the appropriate local, state and federal agencies.
**Product Name:** Bruce's GSR

### SECTION 7  HANDLING AND STORAGE

**HANDLING**
This product is professional strength product to be used by professionals only. Avoid contact with skin. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Impervious boots/shoes covering should be used if material is anticipated to contact feet. As with all chemicals, practice good industrial hygiene when handling this product. In other words, always work in a well-ventilated area and avoid inhalation or ingestion of product.

The manufacturer and seller warrant that this product conforms to its standard specifications when used according to directions. As the conditions of method of its use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for use of this product. Information contained herein is believed to be true but all statements and suggestions are made without any warranty, expressed or implied, regarding accuracy of the information. The hazards connected with the use of this material and the results to be obtained from the use thereof.

**STORAGE**
Avoid excessive heat. Avoid storage with oxidizing or reducing agents, acids. Employees should be trained to handle this product safely. Store the product in a cool dry area away from ignition sources. Loosen closures cautiously.

- **Storage temperature:** Store in cool dry place
- **Storage pressure:** Atmospheric

### SECTION 8  EXPOSURE CONTROLS / PERSONAL PROTECTION

**EXPOSURE LIMITS**
Exposure limits have not been established for this mixture. Limits for components are listed below:

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>OSHA PEL TWA STEL</th>
<th>ACGIH TLV TWA STEL</th>
<th>NIOSH TWA STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Alumina Silicate</td>
<td>5 mg/m3</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2. Tallow</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>3. Sodium Hydroxide</td>
<td>2(mg/m3)</td>
<td>2(mg/m3)</td>
<td>2(mg/m3)</td>
</tr>
</tbody>
</table>

**ENGINEERING CONTROLS**
The level of protection and types of control will vary depending upon potential exposure conditions. If user operations generate dust, fume or mist, use adequate ventilation to keep exposure below exposure limit.

**PERSONAL PROTECTION**
To minimize exposure to all chemicals, including this product, use good industrial hygiene and common sense:

- **Ventilation and engineering controls:** Use only in well ventilated area. If necessary, use exhaust ventilation to insure adequate ventilation. Insure that water is readily available and that you are prepared to properly wash out your eyes should the need arise. (Refer to section 4).
- **Respiratory:** Wear NIOSH/MSHA approved organic respirator when ventilation is not adequate or when the sufficiency of ventilation to maintain concentrations below exposure limits is in question.
- **Eye Protection:** Wear safety goggles to protect against eye contact. See OSHA 29 CFR 1910.33
- **Skin:** Wear chemical impervious gloves. Wear protective clothing appropriate for the task to prevent skin contact. Wash skin after use. Wash contaminated clothing and dry before reuse.
- **Other:** One should always use chemicals with an awareness of the potential hazard of the effect on the human system.
**Product Name:** Bruce’s GSR

**SECTION 9 | PHYSICAL AND CHEMICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Physical State and Appearance: Solid Thick paste mixture</th>
<th>Color: White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor: mild clay scent</td>
<td>pH: 9-10 (basic)</td>
</tr>
<tr>
<td>Boiling point: N/A</td>
<td>Freezing point: Not Available</td>
</tr>
<tr>
<td>Melting point: N/A</td>
<td>Solubility in water: soluble</td>
</tr>
<tr>
<td>Flammability: Not Applicable</td>
<td>Viscosity: N/A</td>
</tr>
<tr>
<td>Flash point: Not Applicable</td>
<td>Relative density: Not Available</td>
</tr>
<tr>
<td>Flammability (solid, gas): Not applicable</td>
<td>Particle Size: 1-2 Micron</td>
</tr>
<tr>
<td>Vapor pressure: Not Available</td>
<td></td>
</tr>
</tbody>
</table>

**SECTION 10 | STABILITY AND REACTIVITY**

*Chemical Stability:* Stable under ambient temperature and atmospheric pressure. Stable under recommended storage and handling conditions.

*Conditions to avoid:* Keep away from high temperature.

*Incompatibility with other materials:* None known.

*Hazardous decomposition products:* There are no known hazardous decomposition materials of this mixture.

*Hazardous polymerization:* Major components of this mixture show no hazardous polymerization.

*Conditions to Avoid:* no anticipated hazards if used as intended

**SECTION 11 | TOXICOLOGICAL INFORMATION**

Toxicological information has not been established on this mixture. Toxicological information on components within this mixture is given by:

- Respirable crystalline silica from occupational sources is listed as a carcinogenic to humans.
- Presence of crystalline silica dust is not present in this source due to the chemically-bound nature of the product preventing airborne exposure.

**COMPONENT #**

1. Alumina Silicate  
2. Tallow  
3. Sodium Hydroxide

**TOXICITY**

1. not established
2. not established
3. LD<sub>50</sub> rat oral 500 mg/kg/ rat dermal 1350mg/kg

**SECTION 12 | ECOLOGICAL INFORMATION**

Ecological information not established on this mixture. Ecological information on components within this mixture are given by:

- Respirable crystalline silica from occupational sources is listed as a carcinogenic to humans.
- Presence of crystalline silica dust is not present in this source due to the chemically-bound nature of the product preventing airborne exposure.
COMPONENT #  
1. Alumina Silicate  
2. Tallow  
3. Sodium Hydroxide  

TOXICITY  
Not established  
Not Established  

LC50 fishes 1 45.4 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss) LC50 other aquatic organisms 1 100 mg/l (48 h; Daphnia magna;) LC50 fish 2 189 mg/l.TLM fish 1 125 ppm (96 h; Gambusia affinis;) TLM fish 2 99 mg/l (48 h; Lepomis macrochirus;)

SECTION 13  DISPOSAL CONSIDERATIONS

Dispose of all waste, empty bottles and contaminated equipment in accordance with all applicable federal, state and local health and environmental regulations.

Do not dump into storm drains or any body of water. All disposal methods must be in compliance with all federal, State/ Provincial and local laws and regulations. Regulations may vary in different locations.

Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. The vendor has no control over the management practices or the processes by which the party who handles or uses this material. The information presented here pertains only to the product as shipped in its intended condition and recommended usage.

SECTION 14  TRANSPORT INFORMATION

DOT (US)  
Not a regulated material  

IMDG  
Not a regulated material

SECTION 15  REGULATORY INFORMATION

US Federal Regulations:  
OSHA standards require that information be provided to employees regarding the hazards of chemicals by means of a hazard communication program including labeling, safety data sheet (SDS) sheets, training and access to written records. We request that you, as per your legal duty to, make all information in this SDS available to your employees and those who handle or consume the product. To aid our customers in complying with regulatory requirements regulatory information for components of this product are indicated below.

This mixture has no established regulatory information all regulatory information given is based on individual components of the mixture by component number.

SECTION 16  OTHER INFORMATION
Product Name: Bruce’s GSR

While the information is believed to be accurate, CTI makes no representations as to its accuracy or sufficiency. This SDS summarizes to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. All information appearing herein is based upon data obtained from the manufacturer and/or recognized technical sources of each individual component. Since CTI cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material. Users are responsible to verify this data under their own operating conditions to determine whether this product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product, or from the publication or use of, or reliance on information contained herein. This information relates only to the product-designated herein, and does not relate to its use in combination with any other material or in any other process.