## SAFETY DATA SHEET – Red Potash

### Section I – Product and Company Identification

**INTREPID POTASH – NEW MEXICO, LLC**
707 17th St. Suite 4200
Denver, CO 80202
Office 303-296-3006
Fax 303-298-7502
Web [http://www.intrepidpotash.com/Contact.aspx](http://www.intrepidpotash.com/Contact.aspx)

EMERGENCIES: CALL (800) 424-9300 (CHEMTREC)

HEALTH EMERGENCIES: CONTACT YOUR LOCAL POISON CENTER

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Formula</th>
<th>Synonym</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Granular Red Potash, Red Fine Standard Potash</td>
<td>KCl</td>
<td>Muriate of Potash</td>
<td>Fertilizer, Crop Nutrient, Industrial, and Animal Feed</td>
</tr>
</tbody>
</table>

### Section II – Hazard Identification

#### Classification of the substance or mixture:

<table>
<thead>
<tr>
<th>GHS07</th>
<th>Hazard Category</th>
<th>Hazard Code</th>
<th>Health Hazard Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Irritation</td>
<td>2A</td>
<td>H319</td>
<td>Can cause serious eye irritation.</td>
</tr>
<tr>
<td>Skin Irritation</td>
<td>3</td>
<td>H316</td>
<td>Can cause mild skin irritation.</td>
</tr>
<tr>
<td>Respiratory Irritation</td>
<td>3</td>
<td>H335</td>
<td>May cause respiratory irritation.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>5</td>
<td>H303</td>
<td>May be harmful if swallowed</td>
</tr>
</tbody>
</table>

#### Label Elements:

<table>
<thead>
<tr>
<th>GHS07</th>
<th>Hazard Statements</th>
<th>Precautionary Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>H315</td>
<td>Causes skin and eye irritation (especially in open wounds).</td>
<td></td>
</tr>
<tr>
<td>H320</td>
<td>May cause respiratory irritation.</td>
<td></td>
</tr>
<tr>
<td>H335</td>
<td>May be harmful if swallowed.</td>
<td></td>
</tr>
<tr>
<td>P280</td>
<td>Wear protective clothing (see Section VII).</td>
<td></td>
</tr>
<tr>
<td>P305</td>
<td>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</td>
<td></td>
</tr>
<tr>
<td>P351</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P338</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### NFPA

- Health: 0
- Flammability: 0
- Special Hazard: 0
- Instability: 0

#### HMIS

- Health: 1
- Flammability: 0
- Physical Hazard: 0
- Personal Protection: E

Carcinogenicity Lists:
- IARC Monograph: No
- NTP: No
- OSHA: No
Section III – Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Chemical Name(s)</th>
<th>CAS No.</th>
<th>Exposure Limits</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>OSHA PEL</td>
<td>TLV - TWA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>mg/m³</td>
<td>ppm</td>
</tr>
<tr>
<td>Potassium Chloride</td>
<td>7447-40-7</td>
<td>15 / 5*</td>
<td>10**</td>
</tr>
<tr>
<td>Sodium Chloride</td>
<td>7647-14-5</td>
<td>15 / 5*</td>
<td>10**</td>
</tr>
</tbody>
</table>

May contain up to 0.25% base lubrication oil and/or 0.03% neutralized primary aliphatic amines.

*Total Dust / Respirable dust

**Based on ACGIH nuisance dust limits.

Section IV – First Aid Measures

| Eyes: | Rinse cautiously with water for several minutes. Flush with water, including under upper & lower lids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention/advice if pain and irritation persists. |
| Skin: | Wash thoroughly with water. Obtain medical advice/attention if irritation persists. |
| Ingestion: | A large body load may cause vomiting, diarrhea, cramps, tingling in hands and feet, weak pulse, and circulatory disturbances. Administer water if patient is conscious. Ingesting potash will usually cause purging of the stomach by vomiting. Get Medical attention. |
| Inhalation: | If individual is experiencing respiratory discomfort or irritation. Remove to fresh air. If discomfort or irritation persists, get medical attention/advice. |

Section V – Fire Fighting Measures

| Flash Point: | No autoignition |
| Lower Explosive Limit: | Not Applicable |
| Upper Explosive Limit: | Not Applicable |

Unusual Fire and Explosion Hazards: When subjected to extremely high temperatures, it may release small quantities of chlorine gas.

Extinguishing Media: As required for surrounding fire. Potash is non-flammable and does not support combustion.

Special Firefighting Procedures and Equipment: Positive pressure, self-contained breathing apparatus is required for all firefighting activities involving hazardous materials. Full structural firefighting (bunker) gear is the minimum acceptable attire. The need for proximity, entry, flashover and/or special chemical protective clothing (see Section 8) needs to be determined for each incident by a competent firefighting safety professional. Water used for fire suppression and cooling may become contaminated. Discharge to sewer system(s) or environment may be restricted, requiring containment and proper disposal of water.

Section VI – Accidental Release Measures

Small Spill: Sweep up and use as fertilizer if non-contaminated.

Large Spill: Collect with appropriate equipment. If on a hard surface, sweep up residue with brooms. If on soil, remove and collect the top 5 cm of soil.

Release Notes: Potash is highly soluble and can be quickly diluted below the toxic level by relatively large amounts of water. Potash which has entered a small non-permanent pond should be removed by pumping the pond dry. If spill could potentially enter any waterway, including intermittent dry creeks, contact the local authorities. If in the U.S., contact the US COAST GUARD NATIONAL RESPONSE CENTER toll free number, 800-424-8802. In case of accident or road spill notify: CHEMTREC IN USA AT 800-424-9300; CANUTEC in Canada at 613-996-6666 CHEMTREC in other countries at (International code)+1-703-527-3887.

Comments: See Section XIII for disposal information and Section XV for regulatory requirements. Large and small spills may have a broad Definition depending on the user’s handling system. Therefore, the spill category must be defined at the point of release by technically qualified personnel.

Section VII – Handling and Storage

Ventilation: Local exhaust to reduce dust concentrations below recommended levels.

Handling: Avoid generating dust by excessive or unnecessary movement.

Storage: Store in a dry location. Avoid contact with aluminum or carbon steel to minimize corrosion.
Section VIII – Exposure Controls/Personal Protection

Engineering Controls: May be necessary to minimize dust levels.

Personal Protection:

Eye Protection: Use tight-fitting safety goggles in areas of high dust concentration.

Protective Clothing: Gloves, long sleeve shirts and long pants. Launder work clothing regularly

Respiratory Protection: Minimum NIOSH approved N95 filter type dust respirators until engineering controls are implemented.

Other Protective Clothing or Equipment: Optional

Section IX – Physical and Chemical Properties

Appearance/Color/Odor: White granules to 4mm in size. Granules may have a slight oily odor.

Melting Point/Range: 778°C

Solubility in Water: 99.5 – 99.999%; 34.2 g/100ml @20°C

Specific Gravity: 2.0 (H_2O = 1)

Vapor Density: Not Applicable

Bulk Density: 70-72 lbs/ft³

pH: 8 – 9 (solution)

Vapor Pressure (mmHg): Not Applicable

Molecular Weight: 74

% Volatiles: < 0.5

Evaporation Rate: Not Applicable

Boiling Point: 1500°C (sublimes)

Boiling Point/Range: 1420 - 1500°C

Vapor Pressure (mmHg): Not Applicable

Section X – Stability and Reactivity

Stability: Stable

Hazardous Polymerization: Will not occur

Conditions to Avoid: None


Hazardous Decomposition Products: None

Section XI Toxicological Information

Significant Routes of Exposure: Eyes, skin, inhalation, ingestion

Toxicity to Animals: Oral LD50 (mouse, rat): 1500 – 2600 mg/kg

Acute Inhalation Toxicity: No data available

Acute Toxicity: Other Routes: No data available

Acute Dermal Toxicity: No data available

Repeated Dose Toxicity: No data available

Eye & Skin Irritation/Corrosion: Not expected to be toxic by dermal exposure as defined by OSHA

Developmental Toxicity/Teratogenicity: No data available

Bacterial Genetic Toxicity In-Vitro Gene Mutation: (Saccharomyces cerevisiae) - Mitotic recombination: NOAEL = 300 mM.

Non-Bacterial Genetic Toxicity In-Vitro Chromosomal Aberration: No data available

Toxicity to Reproduction: No data available

Carcinogenicity: No data available

Special Remarks on Toxicity to Animals: Not reported to be carcinogenic mutagenic, teratogenic or allergenic.

Other Effects on Humans: Large doses by mouth can cause gastrointestinal irritation, purging, weakness and circulatory disturbances. Potassium chloride used as a dietary supplement in food for human consumption is generally recognized as safe (GRAS).

Special Remarks on Chronic Effects on Humans: None

Special Remarks on Other Effects on Humans: None
Section XII – Ecological Information

Ecotoxicity:

Acute Toxicity to Fish: 96 hour LC 50 (rainbow trout) 2010mg/L

Chronic Toxicity to Fish: No data available

Acute Toxicity to Aquatic Invertebrates: 48 hour EC50 (crustacean/daphnia) 337 mg/L (Physaheterostropha) - 96 hrs - LC50 = 940 mg/L.

Chronic Toxicity to Aquatic Invertebrates: No data available

Toxicity to Aquatic Plants: 72 hour ErC 50 (aquatic plants) 2500 mg/L. NEOL (aquatic plants) 0.6 g/L. ((Nitzschia linearis)diatom) - 5 days- 120 hour TLm = 1,337 ppm KCl; (Scendesmus subspicatus) 72 hour - EC50 = 2,500 mg/L. (Chlorella vulgaris) - 3 – 4 months - NOEC = 600 mg KCl/L, LOEL = 700 mg KCl/L.

Toxicity to Bacteria: No data available

Toxicity to Soil Dwelling Organisms: No data available

Toxicity to Terrestrial Plants: No data available

Environmental Fate:

Stability in Water: Dissolves in water and disassociates into K and Cl ions. Ions may be absorbed by plants or by animals ingesting water containing potash.

Stability in Soil: Binds to clay particles.

Transport and Distribution: 1.51 x 10^-8 % to air; 45.2% to water; 54.7% to soil; 0.0755% to sediment

Toxicity: Non-toxic to aquatic organisms as defined by USEPA

Degradation: Chloride and potassium ions.

Section XIII – Disposal Considerations

Product Disposal: Uncontaminated product may be used as fertilizer. Otherwise, dispose according to Federal State or Provincial regulations in a landfill approved to receive potash.

General Comments: Because of its solubility, potash should not be disposed of in a location where run-off will escape.

Section XIV – Transportation Information

<table>
<thead>
<tr>
<th>Proper Shipping Name:</th>
<th>USDOT</th>
<th>TDG - Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard Class:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identification Number:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Packing Group (Technical Name):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labeling/Placarding:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Authorized Packaging:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notes:</td>
<td></td>
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</tbody>
</table>

Section XV – Regulatory Information

UNITED STATES:

SARA Hazard Category: This product has been reviewed according to the EPA Hazard Categories promulgated under Section 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: No
- Pressure Generating: No
- Reactivity: No
- Acute: No
- Chronic: No

40 CFR Part 355 – Extremely Hazardous Substances:
40 CFR Part 370 – Hazardous Chemical Reporting:
All intentional ingredients listed on the TSCA inventory.

SARA Title III Information: This product contains the following substances subject to the reporting requirements of Title III(EPCRA) of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

<table>
<thead>
<tr>
<th>Chemical</th>
<th>CAS No.</th>
<th>Percent by Weight</th>
<th>CERCLA RQ (lbs.)</th>
<th>SARA (1986) Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>311 312 313</td>
</tr>
<tr>
<td></td>
<td>Potassium Chloride</td>
<td>Sodium Chloride</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------</td>
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<td>-----------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UN Number</td>
<td>7447-40-7</td>
<td>7647-14-5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mol Wt</td>
<td>95-99.8</td>
<td>0.1-4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NA</td>
<td>No</td>
<td>No</td>
<td></td>
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<td>No</td>
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<td>No</td>
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</tbody>
</table>

CERCLA/Superfund, 40 CFR Parts 117,302: If this product contains components subject to substances designated a CERCLA Reportable Quantity (RQ) Substances, it will be designated in the above table with the RQ value in pounds. If there is a release of RQ Substance to the environment, notification to the National Response Center, Washington D.C. (1-800-424-8802) is required.

CANADA:

WHMIS Hazard Symbol and Classification: Not controlled

Ingredient Disclosure List: This product does not contain ingredient(s) on this list.

Environmental Protection: All intentional ingredients are listed on the DSL (Domestic Substance List).

Section XVI – Other Information

<table>
<thead>
<tr>
<th>NFPA Hazard Rating:</th>
<th>Health 1</th>
<th>Fire 0</th>
<th>Reactivity 0</th>
<th>Special Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 = Insignificant</td>
<td>1 = Slight</td>
<td>2 = Moderate</td>
<td>3 = High</td>
<td>4 = Extreme</td>
</tr>
</tbody>
</table>

Comments: None

Section(s) changed since last revision: SDS is designed to comply with U.S. DOL: OSHA and MSHA HazCom standards in effect on the revision date.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief as of the revision date noted below. This information is not a warranty or quality specification. The user of the product is solely responsible for determining the suitability of use in each particular situation. This information relates only to the specific material designated and may not be valid for the material used in combination with any other materials or in any process. The user of the product assumes all risks and responsibilities in connection with the use of the product, and Intrepid will not be responsible for any damages relating to the use of the product.

(Revision Date 01/14)