Material Safety Data Sheet / Safety Data Sheet
Potassium Dichromate

Section 1: Chemical Product Identifier and Synonyms

Product Name: Potassium Dichromate
UN Number: 3087
CAS Number: 7778-50-9
Synonym: Potassium Bichromate
Chemical Formula: K2Cr2O7

Section 2: Composition and Information on Ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS Number:</th>
<th>% By Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium Dichromate</td>
<td>7778-50-9</td>
<td>&gt;100</td>
</tr>
</tbody>
</table>

**Toxicology Data On Ingredients:** Potassium Dichromate LD50: Not Available. LC50: Not Available

Section 3: Hazards Identification

**Potential Acute Health Effects:**
- May intensify fire; oxidizer.
- Toxic if swallowed.
- Harmful in contact with skin.
- Fatal if inhaled.
- Causes severe skin burns and eye damage.
- May cause an allergy or asthma symptoms or breathing difficulties if inhaled.
- May cause an allergic skin reaction.
- May cause genetic defects.
- May cause cancer.
- May damage fertility or the unborn child.
- Causes damage to organs (kidneys, liver, skin) through prolonged or repeated exposure.
- Very toxic to aquatic life.
Very toxic to aquatic life with long lasting effects.

**Potential Chronic Health Effects:**
- CARCINOGENIC EFFECTS: Not available.
- MUTAGENIC EFFECTS: Not available.
- TERATOGENIC EFFECTS: Not available.
- DEVELOPMENTAL TOXICITY: Not available.

### Section 4: First Aid Measures

**Eye Contact:**
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.

**Skin Contact:**
Immediately call a poison center or doctor/physician. Wash contaminated clothing before reuse. Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

**Inhalation:**
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.

**Ingestion:**
Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

### Section 5: Fire and Explosion Data

**Flammability of the Product:** Not available.
- **Auto-Ignition Temperature:** Not available.
- **Flash Points:** Not applicable.
- **Flammable Limits:** Not applicable.
- **Products of Combustion:** Not available.
- **Fire Hazards in Presence of Various Substances:** Not applicable.
- **Explosion Hazards in Presence of Various Substances:** Not available.
- **Risks of explosion of the product in presence of mechanical impact:** Not available.
- **Risks of explosion of the product in presence of static discharge:** Not available.
- **Fire Fighting Media and Instructions:** Foam. Dry powder. Carbon dioxide. Water spray. Sand.
  
  DO NOT use a heavy water stream.

**Special Remarks on Fire Hazards:** Not available.

**Special Remarks on Explosion Hazards:** Not available.

### Section 6: Accidental Release Measures

**Small Spill:**
Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation. Keep
people away from and upwind of spill/leak. Evacuate personnel to safe areas.

**Large Spill:**
If in laboratory setting, follow Chemical Hygiene plan procedures. Place into properly labeled containers for recovery or disposal. If necessary, use trained response staff/contractor. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Collect solids in powder form using vacuum with filter.

### Section 7: Handling and Storage

**Precautions:**
Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Take any precaution to avoid mixing with Combustibles. Do not breathe dust. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Eliminate all ignition sources if safe to do so. Do not eat, drink or smoke when using this product. Wash exposed skin thoroughly after handling. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace.

**Storage:**
Keep only in the original container in a cool, well ventilated place away from: combustible materials, Heat sources, Ignition sources, incompatible materials. Keep container closed when not in use. Keep in fireproof place.

### Section 8: Exposure Controls / Personal Protection

**Engineering Controls:**
Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation. Material should be handled in a laboratory hood whenever possible.

**Personal Protection:**

**Personal Protection in Case of a Large Spill:**
Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits:**
Consult local authorities for acceptable exposure limits.
### Section 9: Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical state and appearance</strong></td>
<td>Solid.</td>
</tr>
<tr>
<td><strong>Odour</strong></td>
<td>Odourless.</td>
</tr>
<tr>
<td><strong>Taste</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Molecular Weight</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Colour</strong></td>
<td>Orange</td>
</tr>
<tr>
<td><strong>pH (1% soln/water)</strong></td>
<td>4-5% solution.</td>
</tr>
<tr>
<td><strong>Boiling Point</strong></td>
<td>500 °C</td>
</tr>
<tr>
<td><strong>Melting Point</strong></td>
<td>398 °C</td>
</tr>
<tr>
<td><strong>Critical Temperature</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Specific Gravity</strong></td>
<td>294.19 g/mole (Water = 1)</td>
</tr>
<tr>
<td><strong>Vapour Pressure</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Vapour Density</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Volutility</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Odour Threshold</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Water/Oil Dist. Coeff.</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Ionicity (in Water)</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Dispersion Properties</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Solubility</strong></td>
<td>Soluble in water.</td>
</tr>
</tbody>
</table>

### Section 10: Stability and Reactivity Data

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stability</strong></td>
<td>The product is stable under normal conditions.</td>
</tr>
<tr>
<td><strong>Instability Temperature</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Incompatibility with various substances</strong></td>
<td>Organic compounds. Strong reducing agents. metals. combustible materials.</td>
</tr>
<tr>
<td><strong>Corrosivity</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Special Remarks on Reactivity</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Special Remarks on Corrosivity</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Polymerization</strong></td>
<td>Does not occur.</td>
</tr>
</tbody>
</table>

### Section 11: Toxicological Information

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Routes of Entry</strong></td>
<td>Eye contact. Inhalation. Ingestion.</td>
</tr>
<tr>
<td><strong>Toxicity to Animals</strong></td>
<td>(LD50): Not available. LC50: Not available.</td>
</tr>
<tr>
<td><strong>Chronic Effects on Humans</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Other Toxic Effects on Humans</strong></td>
<td>Slightly hazardous in case of ingestion, of inhalation. May cause harm to breastfed babies.</td>
</tr>
<tr>
<td><strong>Special Remarks on Toxicity to Animals</strong></td>
<td>Not available.</td>
</tr>
</tbody>
</table>
Special Remarks on Chronic Effects on Humans: Not available.
Special Remarks on other Toxic Effects on Humans: Not available.

Section 12: Ecological Information

Ecotoxicity: Very toxic to aquatic life with long lasting effects.

BOD5 and COD: Not available.

Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are as toxic as the original product.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Information

Waste Disposal: Dispose of in accordance with local regulations

Section 14: Transport Information

DOT Classification: CLASS 5.1: Oxidizing material. CLASS 6.1: Poisonous material.

Identification: Potassium Dichromate UN Number: UN3087 PG: II

Special Provisions for Transport: Not available.

Section 15: Regulatory Information


Section 16: Other Information

The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials. The author will not be held liable for any damage or injury caused by this product and does not obviate the requirement for end users to carry out their own workplace and specific use risk assessment.

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