

MSDS – Potassium Persulphate

MATERIAL SAFETY DATA SHEET (MSDS) / SAFETY DATA SHEET (SDS)

1. Identification

- **Product Name:** Potassium Persulphate
- **Synonyms:** Potassium Persulfate, Potassium Peroxydisulphate
- **Chemical Formula:** $K_2S_2O_8$
- **CAS Number:** 7727-21-1
- **Recommended Use:** Oxidizing agent, polymerization initiator, bleaching agent, laboratory reagent
- **Manufacturer/Supplier:** Not specified (generic MSDS)
- **Emergency Contact:** Local emergency services

2. Hazard Identification

GHS Classification:

- **Oxidizing Solid – Category 3**
- **Acute Toxicity (Oral) – Category 4**
- **Skin Irritation – Category 2**
- **Serious Eye Damage/Irritation – Category 2A**
- **Respiratory Sensitizer – Category 1**

Signal Word: Danger

Hazard Statements:

- May intensify fire; oxidizer
- Harmful if swallowed
- Causes skin and eye irritation
- May cause allergy or asthma symptoms or breathing difficulties if inhaled

Precautionary Statements:

- Keep away from heat and combustible materials
- Avoid breathing dust
- Wear protective gloves, clothing, and eye/face protection

3. Composition / Information on Ingredients

Component	Concentration
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Potassium Persulphate	≥ 99%
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4. First Aid Measures

- **Inhalation:** Move person to fresh air. Seek medical attention if symptoms persist.
- **Skin Contact:** Wash immediately with plenty of water. Remove contaminated clothing.
- **Eye Contact:** Rinse cautiously with water for at least 15 minutes. Seek medical attention.
- **Ingestion:** Rinse mouth. Do NOT induce vomiting. Get medical help immediately.

5. Fire-Fighting Measures

- **Suitable Extinguishing Media:** Water spray, foam
- **Specific Hazards:** Strong oxidizer; contact with combustible materials may cause fire
- **Protective Equipment:** Self-contained breathing apparatus (SCBA), full protective gear

6. Accidental Release Measures

- Avoid dust formation
- Wear appropriate PPE
- Sweep up carefully and place in suitable container

- Do not allow to enter drains or waterways
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7. Handling and Storage

Handling:

- Use in well-ventilated areas
- Avoid contact with skin, eyes, and clothing

Storage:

- Store in a cool, dry, well-ventilated area
 - Keep away from organic materials, reducing agents, and heat
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8. Exposure Controls / Personal Protection

- Engineering Controls: Local exhaust ventilation
 - Respiratory Protection: Dust mask or respirator if exposure limits exceeded
 - Hand Protection: Chemical-resistant gloves
 - Eye Protection: Safety goggles or face shield
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9. Physical and Chemical Properties

- Appearance: White crystalline powder
 - Odour: Odourless
 - pH: 2.5–3.5 (5% solution)
 - Solubility: Soluble in water
 - Melting Point: Decomposes above 100 °C
 - Density: ~2.48 g/cm³
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10. Stability and Reactivity

- Stability: Stable under recommended conditions
 - Reactivity: Strong oxidizer
 - Incompatible Materials: Organic materials, reducing agents, acids, metals
 - Hazardous Decomposition Products: Sulphur oxides, potassium oxides
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11. Toxicological Information

- Acute Toxicity (Oral): Harmful if swallowed
 - Skin/Eye Effects: Irritating
 - Respiratory Effects: May cause sensitization and asthma-like symptoms
 - Chronic Effects: Prolonged exposure may cause respiratory sensitization
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12. Ecological Information

- Harmful to aquatic life in high concentrations
 - Avoid environmental release
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13. Disposal Considerations

- Dispose of in accordance with local, regional, and national regulations
 - Do not dispose with household waste
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14. Transport Information

- UN Number: UN 1492
 - Proper Shipping Name: Potassium Persulphate
 - Hazard Class: 5.1 (Oxidizer)
 - Packing Group: III
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15. Regulatory Information

- **Classified according to GHS**
 - **Subject to local chemical safety regulations**
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16. Other Information

- **Revision Date: [16th August 2025]**
- **Disclaimer: This MSDS is provided for informational purposes only and does not replace regulatory compliance requirements.**