

1. Product and Company Identification

Material name	POTASSIUM CHLORIDE
Version #	01
Revision date	09-02-2011
CAS #	7447-40-7
Product Codes	J.T.Baker: 3040, 3045, 3046, 3052, 4001 Macron: 6307, 6838, 6841, 6842, 6845, 6858, V483
Synonym(s)	Potassium monochloride
Manufacturer	Avantor Performance Materials, Inc.
Address	3477 Corporate Parkway Suite #200 Center Valley, PA 18034 US
Customer Service	855-282-6867
24 Hour Emergency	908-859-2151
Chemtrec	800-424-9300

2. Hazards Identification

Emergency overview	WARNING Causes eye irritation.
OSHA regulatory status	This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).
Potential health effects	
Routes of exposure	Inhalation. Skin contact. Eye contact. Ingestion.
Eyes	Causes eye irritation.
Skin	Dust or powder may irritate the skin.
Inhalation	Inhalation of dusts may cause respiratory irritation.
Ingestion	May be harmful if swallowed. May cause irritation of the gastrointestinal tract.
Target organs	Eyes. Skin. Upper respiratory tract.
Chronic effects	None known.
Potential environmental effects	Harmful to aquatic organisms.

3. Composition / Information on Ingredients

Non-hazardous components	CAS #	Percent
POTASSIUM CHLORIDE	7447-40-7	99 - 100

4. First Aid Measures

First aid procedures	
Eye contact	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention if irritation develops and persists.
Skin contact	Immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if irritation develops and persists.
Inhalation	Move to fresh air. Treat symptomatically. Get medical attention if symptoms persist.
Ingestion	Drink plenty of water. Seek medical advice. If ingestion of a large amount does occur, call a poison control center immediately.
Notes to physician	Treat symptomatically.

General advice Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire Fighting Measures

Flammable properties This product is not flammable.

Extinguishing media

Suitable extinguishing media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media None known.

Protection of firefighters

Protective equipment and precautions for firefighters Firefighters should wear full protective gear. Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

Special protective equipment for fire-fighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental Release Measures

Personal precautions Keep unnecessary personnel away. Keep upwind. Ventilate the area. Avoid inhalation of dust from the spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Environmental precautions Prevent further leakage or spillage if safe to do so.

Methods for containment If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. Prevent entry into waterways, sewer, basements or confined areas.

Methods for cleaning up Avoid dust formation.

Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal.

Large Spills: Collect dust or particulates using a vacuum cleaner with a HEPA filter. Reduce airborne dust and prevent scattering by moistening with water.

Never return spills in original containers for re-use. Clean contaminated surface thoroughly. Clean up in accordance with all applicable regulations.

7. Handling and Storage

Handling Keep formation of airborne dusts to a minimum. Avoid breathing dust. Avoid contact with eyes, skin, and clothing. Do not taste or swallow. Use only with adequate ventilation. Wash thoroughly after handling. See Section 8 of the MSDS for Personal Protective Equipment.

Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure Controls / Personal Protection

Exposure guidelines Not established.

Engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal protective equipment

Eye / face protection Use tight fitting goggles if dust is generated.

Skin protection Wear appropriate clothing to prevent repeated or prolonged skin contact.

Respiratory protection Wear respirator if there is dust formation.

General hygiene considerations Provide eyewash station and safety shower. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical & Chemical Properties

Appearance	Powder.
Color	White.
Odor	Odorless.
Odor threshold	Not available.
Physical state	Solid.
Form	Powder.
pH	7 Aqueous solution
Melting point	1419.8 °F (771 °C)
Freezing point	1419.8 °F (771 °C)
Boiling point	2732 °F (1500 °C)
Flash point	Not available.
Evaporation rate	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Vapor density	Not available.
Specific gravity	1.987
Relative density	Not available.
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Molecular weight	74.55 g/mol
Molecular formula	Cl-K

10. Chemical Stability & Reactivity Information

Chemical stability	Stable under normal temperature conditions.
Conditions to avoid	Excessive heat.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Upon combustion, oxides of chlorine may be released. May include oxides of potassium.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Toxicological data

Product

POTASSIUM CHLORIDE (7447-40-7)

Test Results

Acute Oral LD50 Rat: 2600 mg/kg

Sensitization	Not a skin sensitizer.
Acute effects	May be harmful if swallowed.
Local effects	Causes eye irritation.
Chronic effects	None known.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
Skin corrosion/irritation	Contact with skin may cause irritation.

Epidemiology	No epidemiological data is available for this product.
Mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Neurological effects	None known.
Reproductive effects	Contains no ingredient listed as toxic to reproduction
Teratogenicity	No data available to indicate product or any components present at greater than 0.1% may cause birth defects.
Symptoms and target organs	Irritant effects.

12. Ecological Information

Ecotoxicological data

Product	Test Results
POTASSIUM CHLORIDE (7447-40-7)	EC50 Water flea (Daphnia magna): 83 mg/l 48.00 hours

Ecotoxicity	Harmful to aquatic life.
Environmental effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Persistence and degradability	This material is readily biodegraded and is not likely to bioconcentrate.
Partition coefficient (n-octanol/water)	Not available

13. Disposal Considerations

Disposal instructions	Dispose of contents/container in accordance with local/regional/national/international regulations.
Contaminated packaging	Offer rinsed packaging material to local recycling facilities. Since emptied containers retain product residue, follow label warnings even after container is emptied.

14. Transport Information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory Information

US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List. CERCLA/SARA Hazardous Substances - Not applicable.
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CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
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Section 311 hazardous chemical	Yes
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Food and Drug Administration (FDA)
Total food additive
Direct food additive
GRAS food additive

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

Saf-T-Data
Health: 1 - Slight
Flammability: 0 - None
Reactivity: 1 - Slight
Contact: 2 - Moderate
Lab Protective Equip: B - GOGGLES; LAB COAT; VENT HOOD; PROPER GLOVES
Storage Color Code: G - Green (General Storage)

16. Labeling Info

Label Hazard Warning WARNING

Causes eye irritation.

Label Precautions Avoid breathing dust. Avoid contact with eyes, skin, and clothing. Do not taste or swallow. Use only with adequate ventilation. Wash thoroughly after handling. Keep container closed.

Label First Aid Immediately flush eyes with plenty of water for at least 15 minutes. Flush skin thoroughly with water. If gas/fume/vapor/dust/mist from the material is inhaled, remove the affected person immediately to fresh air. Get medical attention if irritation develops or persists. If ingestion of a large amount does occur, call a poison control center immediately.

17. Other Information

NFPA ratings
Health: 2
Flammability: 0
Instability: 0

Disclaimer

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