

\*\*\*\* MATERIAL SAFETY DATA SHEET \*\*\*\*

Potassium Chloride  
 19310

\*\*\*\* SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION \*\*\*\*

MSDS Name: Potassium Chloride  
 Catalog Numbers:  
 S77375, S77375-1, S77375-2, BP366 1, BP366 500, BP366-1, BP366-500, BP3661,  
 BP366500, BP366415, P217 10, P217 3, P217 500, P217-10, P217-3, P217-500,  
 P21710, P217250LB, P2173, P217500, P330 3, P330 500, P330-10, P330-3,  
 P330-500, P330250LB, P3303, P330500, P333LC, S79807, XX933050KG,  
 XXP220ET3KG  
 Synonyms:  
 Dipotassium dichloride; Monopotassium chloride; Potassium  
 monochloride  
 Company Identification: Fisher Scientific  
 1 Reagent Lane  
 Fairlawn, NJ 07410  
 For information, call: 201-796-7100  
 Emergency Number: 201-796-7100  
 For CHEMTREC assistance, call: 800-424-9300  
 For International CHEMTREC assistance, call: 703-527-3887

\*\*\*\* SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS \*\*\*\*

CAS#	Chemical Name	%	EINECS#
7447-40-7	Potassium chloride	ca.100	231-211-8

\*\*\*\* SECTION 3 - HAZARDS IDENTIFICATION \*\*\*\*

EMERGENCY OVERVIEW

Appearance: white crystals.  
 Warning! Causes respiratory tract irritation. Hygroscopic. Causes  
 eye and skin irritation. May cause digestive tract irritation with  
 nausea, vomiting, and diarrhea.  
 Target Organs: No data found.

Potential Health Effects

Eye:  
 Causes eye irritation. May cause chemical conjunctivitis.  
 Skin:  
 Causes skin irritation.  
 Ingestion:  
 May cause gastrointestinal irritation with nausea, vomiting and  
 diarrhea. May cause gastric disturbances and electrolytic imbalance.  
 Inhalation:  
 Causes respiratory tract irritation. Can produce delayed pulmonary  
 edema.  
 Chronic:  
 Effects may be delayed. Laboratory experiments have resulted in  
 mutagenic effects.

\*\*\*\* SECTION 4 - FIRST AID MEASURES \*\*\*\*

Eyes:  
 Immediately flush eyes with plenty of water for at least 15 minutes,  
 occasionally lifting the upper and lower eyelids. Get medical aid.  
 Skin:  
 Get medical aid. Flush skin with plenty of soap and water for at  
 least 15 minutes while removing contaminated clothing and shoes. Wash  
 clothing before reuse.  
 Ingestion:  
 If victim is conscious and alert, give 2-4 cupfuls of milk or water.  
 Never give anything by mouth to an unconscious person. Get medical  
 aid.  
 Inhalation:  
 Remove from exposure to fresh air immediately. If not breathing,  
 give artificial respiration. If breathing is difficult, give oxygen.  
 Get medical aid.  
 Notes to Physician:  
 Treat symptomatically and supportively.

\*\*\*\* SECTION 5 - FIRE FIGHTING MEASURES \*\*\*\*

General Information:  
 As in any fire, wear a self-contained breathing apparatus in  
 pressure-demand, MSHA/NIOSH (approved or equivalent), and full  
 protective gear. During a fire, irritating and highly toxic gases  
 may be generated by thermal decomposition or combustion. This  
 material in sufficient quantity and reduced particle size is capable  
 of creating a dust explosion.  
 Extinguishing Media:  
 Use extinguishing media most appropriate for the surrounding fire.  
 Use water spray, dry chemical, carbon dioxide, or appropriate foam.

\*\*\*\* SECTION 6 - ACCIDENTAL RELEASE MEASURES \*\*\*\*

General Information: Use proper personal protective equipment as indicated  
 in Section 8.

Spills/Leaks:  
 Clean up spills immediately, observing precautions in the Protective  
 Equipment section. Sweep up or absorb material, then place into a  
 suitable clean, dry, closed container for disposal. Avoid generating  
 dusty conditions. Provide ventilation.

\*\*\*\* SECTION 7 - HANDLING and STORAGE \*\*\*\*

Handling:  
 Remove contaminated clothing and wash before reuse. Minimize dust  
 generation and accumulation. Avoid prolonged or repeated contact  
 with skin. Avoid contact with eyes, skin, and clothing. Keep  
 container tightly closed. Avoid ingestion and inhalation. Use with  
 adequate ventilation.

Storage:  
 Store in a tightly closed container. Store in a cool, dry,  
 well-ventilated area away from incompatible substances. Store  
 protected from moisture.

\*\*\*\* SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION \*\*\*\*

Engineering Controls:  
 Facilities storing or utilizing this material should be equipped  
 with an eyewash facility and a safety shower. Use adequate  
 ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Potassium chloride	none listed	none listed	none listed

OSHA Vacated PELs:  
 Potassium chloride:  
 No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes:  
 Wear appropriate protective eyeglasses or chemical  
 safety goggles as described by OSHA's eye and face  
 protection regulations in 29 CFR 1910.133 or European  
 Standard EN166.  
 Skin:  
 Wear appropriate protective gloves to prevent skin  
 exposure.  
 Clothing:  
 Wear appropriate protective clothing to prevent skin  
 exposure.  
 Respirators:  
 A respiratory protection program that meets OSHA's 29  
 CFR 1910.134 and ANSI Z89.2 requirements or European  
 Standard EN 149 must be followed whenever workplace  
 conditions warrant a respirator's use.

\*\*\*\* SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES \*\*\*\*

Physical State: Crystals  
 Appearance: white crystals  
 Odor: odorless  
 pH: Not available.  
 Vapor Pressure: Not available.  
 Vapor Density: Not available.  
 Evaporation Rate: Not available.  
 Viscosity: Not available.  
 Boiling Point: Sublimes @ 1500 deg C  
 Freezing/Melting Point: 773 deg C  
 Autoignition Temperature: Not applicable.  
 Flash Point: Not applicable.  
 NFPA Rating: (est.) Health: 1; Flammability: 0; Reactivity: 0  
 Explosion Limits, Lower: Not available.  
 Upper: Not available.  
 Decomposition Temperature:  
 Solubility: completely soluble in water  
 Specific Gravity/Density:  
 Molecular Formula: ClK  
 Molecular Weight: 74.54

\*\*\*\* SECTION 10 - STABILITY AND REACTIVITY \*\*\*\*

Chemical Stability:  
 Stable at room temperature in closed containers under normal storage  
 and handling conditions.

Conditions to Avoid:  
Incompatible materials, dust generation, excess heat, exposure to moist air or water.  
Incompatibilities with Other Materials:  
Moisture, bromine trifluoride, sulfuric acid + permanganates, strong oxidizing agents, strong acids.  
Hazardous Decomposition Products:  
Hydrogen chloride, chlorine, carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, oxides of potassium.  
Hazardous Polymerization: Will not occur.

\*\*\*\* SECTION 11 - TOXICOLOGICAL INFORMATION \*\*\*\*

RTECS#:  
CAS# 7447-40-7: TS8050000  
LD50/LC50:  
CAS# 7447-40-7: Oral, mouse: LD50 = 1500 mg/kg; Oral, rat: LD50 = 2600 mg/kg.  
Carcinogenicity:  
Potassium chloride -  
Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.  
Epidemiology:  
No information available.  
Teratogenicity:  
No information available.  
Reproductive Effects:  
No information available.  
Neurotoxicity:  
No information available.  
Mutagenicity:  
Unscheduled DNA Synthesis: Oral, rat = 1500 ug/kg.; Mutation in Microorganisms = Mouse, Lymphocyte = 2048 mg/L.; DNA Damage = Hamster, Ovary = 260 mmol/L.; Cytogenetic Analysis: Hamster, Lung = 12 gm/L.  
Other Studies:  
Standard Draize Test: Administration into the eye (rabbit) = 500 mg/24H (Mild).

\*\*\*\* SECTION 12 - ECOLOGICAL INFORMATION \*\*\*\*

\*\*\*\* SECTION 13 - DISPOSAL CONSIDERATIONS \*\*\*\*

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste.  
US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.  
RCRA P-Series: None listed.  
RCRA U-Series: None listed.

\*\*\*\* SECTION 14 - TRANSPORT INFORMATION \*\*\*\*

US DOT  
No information available  
Canadian TDG  
No information available.

\*\*\*\* SECTION 15 - REGULATORY INFORMATION \*\*\*\*

US FEDERAL  
TSCA  
CAS# 7447-40-7 is listed on the TSCA inventory.  
Health & Safety Reporting List  
None of the chemicals are on the Health & Safety Reporting List.  
Chemical Test Rules  
None of the chemicals in this product are under a Chemical Test Rule.  
Section 12b  
None of the chemicals are listed under TSCA Section 12b.  
TSCA Significant New Use Rule  
None of the chemicals in this material have a SNUR under TSCA.  
SARA  
Section 302 (RQ)  
None of the chemicals in this material have an RQ.  
Section 302 (TPQ)  
None of the chemicals in this product have a TPQ.  
SARA Codes  
CAS # 7447-40-7: acute.  
Section 313  
No chemicals are reportable under Section 313.  
Clean Air Act:  
This material does not contain any hazardous air pollutants.  
This material does not contain any Class 1 Ozone depleters.  
This material does not contain any Class 2 Ozone depleters.  
Clean Water Act:  
None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.  
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:  
None of the chemicals in this product are considered highly hazardous by OSHA.

STATE  
Potassium chloride is not present on state lists from CA, PA, MN, MA, FL, or NJ.  
California No Significant Risk Level:  
None of the chemicals in this product are listed.  
European/International Regulations  
European Labeling in Accordance with EC Directives  
Hazard Symbols: Not available.  
Risk Phrases:  
Safety Phrases:  
WOK (Water Danger/Protection)  
CAS# 7447-40-7: 1  
United Kingdom Occupational Exposure Limits

Canada  
CAS# 7447-40-7 is listed on Canada's DSL/NDSL List.  
This product has a WHMIS classification of D2B.  
CAS# 7447-40-7 is not listed on Canada's Ingredient Disclosure List.  
Exposure Limits

\*\*\*\* SECTION 16 - ADDITIONAL INFORMATION \*\*\*\*

MSDS Creation Date: 7/15/1999 Revision #2 Date: 8/02/2000

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.