



# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Material name** POTASSIUM CHLORIDE, 1.2% W/V SOLUTION, STRAY LIGHT FILTER  
**Catalog #** 8384  
**Version #** 02  
**Revision date** 24-May-2010  
**CAS #** Mixture  
**Manufacturer information** GFS Chemicals, Inc.  
P.O. Box 245  
Powell, OH 43065 US  
www.gfschemicals.com  
Fax 740-881-5989  
Phone 740-881-5501  
Toll Free 800-858-9682  
Emergency Assistance Chemtrec 800-424-8300

## 2. Hazards Identification

**Emergency overview** Health injuries are not known or expected under normal use.  
**OSHA regulatory status** This product is considered not hazardous under 29 CFR 1910.1200 (Hazard Communication).  
**Potential health effects**  
**Routes of exposure** Not applicable.  
**Eyes** May irritate eyes.  
**Skin** Substance may cause slight skin irritation.  
**Potential environmental effects** Not expected to be harmful to aquatic organisms.

## 3. Composition / Information on Ingredients

Non-hazardous components	CAS #	Percent
WATER	7732-18-5	>98%
POTASSIUM CHLORIDE	7447-40-7	1.2

## 4. First Aid Measures

**First aid procedures**  
**Eye contact** Rinse with water. Get medical attention if irritation develops and persists.  
**Skin contact** Rinse with water. Get medical attention if irritation develops and persists.  
**Inhalation** Unlikely route of exposure as the product does not contain volatile substances.  
**Ingestion** Drink water as a precaution.  
**General advice** If you feel unwell, seek medical advice (show the label where possible).

## 5. Fire Fighting Measures

**Flammable properties** The product is not flammable. No unusual fire or explosion hazards noted.  
**Extinguishing media**  
**Suitable extinguishing media** Water. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>).  
**Protection of firefighters**  
**Protective equipment and precautions for firefighters** In the event of fire, cool tanks with water spray. Use water spray to cool unopened containers.  
**Specific methods** In the event of fire, cool tanks with water spray. Use water spray to cool unopened containers. Cool containers exposed to flames with water until well after the fire is out.

## 6. Accidental Release Measures

<b>Personal precautions</b>	Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained.
<b>Environmental precautions</b>	Prevent further leakage or spillage if safe to do so. Do not contaminate water.
<b>Methods for containment</b>	Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible.
<b>Methods for cleaning up</b>	Dilute with water. Flush to sewer if local regulations permit. Following product recovery, flush area with water.
	Never return spills in original containers for re-use.

## 7. Handling and Storage

<b>Handling</b>	Avoid release to the environment. Handle and open container with care.
<b>Storage</b>	Keep containers tightly closed. Use care in handling/storage.

## 8. Exposure Controls / Personal Protection

### Personal protective equipment

<b>Eye / face protection</b>	Wear safety glasses with side shields (or goggles).
<b>General hygiene considerations</b>	Handle in accordance with good industrial hygiene and safety practice.
<b>General</b>	Not normally needed. Eye wash fountain and emergency showers are recommended.

## 9. Physical & Chemical Properties

<b>Appearance</b>	Clear.
<b>Color</b>	Colorless.
<b>Odor</b>	Odorless.
<b>Odor threshold</b>	Not available.
<b>Physical state</b>	Liquid.
<b>Form</b>	Aqueous solution.
<b>pH</b>	6 - 8
<b>Melting point</b>	< 32 °F (< 0 °C)
<b>Freezing point</b>	Not available.
<b>Boiling point</b>	> 212 °F (> 100 °C)
<b>Flash point</b>	Not available.
<b>Evaporation rate</b>	Not available.
<b>Flammability</b>	Not available.
<b>Flammability limits in air, upper, % by volume</b>	Not available.
<b>Flammability limits in air, lower, % by volume</b>	Not available.
<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	Not available.
<b>Specific gravity</b>	1.0119 estimated
<b>Relative density</b>	1.0118 g/cm <sup>3</sup> estimated
<b>Solubility (water)</b>	Miscible.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Percent volatile</b>	> 98 %

## 10. Chemical Stability & Reactivity Information

<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Incompatible materials</b>	None known.

**Possibility of hazardous reactions**

Hazardous polymerization does not occur.

## 11. Toxicological Information

### Acute effects

**Acute Oral: LD 50**

POTASSIUM CHLORIDE	7447-40-7	Rat 2600 mg/kg
POTASSIUM CHLORIDE	7447-40-7	Guinea pig 2500 mg/kg
POTASSIUM CHLORIDE	7447-40-7	Mouse 383 mg/kg

**Acute Toxicity other routes: LD 50**

POTASSIUM CHLORIDE	7447-40-7	Rat 39 mg/kg Intravenous
POTASSIUM CHLORIDE	7447-40-7	Mouse 117 mg/kg Intravenous

### Toxicology data for the preparation

Acute LD50: 31917 mg/kg, Mouse, Oral, estimated

Acute LD50: 9750 mg/kg, Mouse, Other, estimated

### Carcinogenicity

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

### Further information

This product has no known adverse effect on human health.

## 12. Ecological Information

### Ecotoxicity

Contains a substance which causes risk of hazardous effects to the environment.

#### Invertebrate Toxicity: EC 50

POTASSIUM CHLORIDE	7447-40-7	Tubificid worm ( <i>Tubifex tubifex</i> ) 2000 mg/l 24 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 2440 - 4020 mg/l 12 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Water flea ( <i>Daphnia magna</i> ) 149 mg/l 48 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Water flea ( <i>Daphnia magna</i> ) 166 mg/l 48 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 1020 - 1685 mg/l 6 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Water flea ( <i>Daphnia magna</i> ) 95.3 - 170.7 mg/l 48 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Water flea ( <i>Daphnia magna</i> ) 248.6 - 407.2 mg/l 24 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Water flea ( <i>Daphnia magna</i> ) 78 - 97 mg/l 21 d Renewal Intoxication
POTASSIUM CHLORIDE	7447-40-7	Water flea ( <i>Daphnia magna</i> ) 83 mg/l 48 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Water flea ( <i>Daphnia magna</i> ) 87 - 108 mg/l 21 d Renewal Intoxication
POTASSIUM CHLORIDE	7447-40-7	Water flea ( <i>Daphnia magna</i> ) 204 mg/l 64 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 290 - 480 mg/l 24 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Tubificid worm ( <i>Tubifex tubifex</i> ) 1026 - 1671 mg/l 48 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 2770 - 4340 mg/l 24 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 155 - 280 mg/l 24 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 1690 - 2810 mg/l 6 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 1890 - 3080 mg/l 6 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 1980 - 3060 mg/l 24 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 2100 - 3330 mg/l 3 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 2250 - 3490 mg/l 6 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 2250 - 3490 mg/l 6 h Static Mortality
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 236 - 3880 mg/l 3 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 2400 - 4444 mg/l 6 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Water flea ( <i>Daphnia magna</i> ) 93 mg/l 48 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Tubificid worm ( <i>Tubifex tubifex</i> ) 738 - 937 mg/l 96 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 300 - 510 mg/l 24 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Water flea ( <i>Daphnia magna</i> ) 228 mg/l 64 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 2880 - 4370 mg/l 3 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 1340 - 2240 mg/l 12 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 300 - 530 mg/l 24 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 3060 - 4765 mg/l 3 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 3060 - 4765 mg/l 3 h Static Mortality
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 3390 - 5480 mg/l 12 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 3800 - 7190 mg/l 6 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 400 - 690 mg/l 12 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 4260 - 7456 mg/l 12 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 4260 - 7465 mg/l 12 h Static Mortality
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 500 - 920 mg/l 24 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 5010 - 7010 mg/l 3 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 5765 - 9585 mg/l 3 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 6380 - 11690 mg/l 6 h Static Mortality
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 6380 - 11960 mg/l 6 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 650 - 1470 mg/l 3 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 7100 - 15930 mg/l 3 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 7100 - 15930 mg/l 3 h Static Mortality
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 720 - 1150 mg/l 12 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 770 - 1300 mg/l 12 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 800 - 1400 mg/l 12 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 840 - 1440 mg/l 6 h Static Intoxication
POTASSIUM CHLORIDE	7447-40-7	Zebra mussel ( <i>Dreissena polymorpha</i> ) 2420 - 3410 mg/l 24 h Static Intoxication

#### Micro-organisms Toxicity: LC 50

POTASSIUM CHLORIDE	7447-40-7	Nematode ( <i>Caenorhabditis elegans</i> ) 43609 mg/l 24 h Static Mortality
POTASSIUM CHLORIDE	7447-40-7	Nematode ( <i>Caenorhabditis elegans</i> ) 41560 mg/l 48 h Static Mortality
POTASSIUM CHLORIDE	7447-40-7	Nematode ( <i>Caenorhabditis elegans</i> ) 41200 mg/l 24 h Static Mortality
POTASSIUM CHLORIDE	7447-40-7	Nematode ( <i>Caenorhabditis elegans</i> ) 40830 mg/l 24 h Static Mortality
POTASSIUM CHLORIDE	7447-40-7	Nematode ( <i>Caenorhabditis elegans</i> ) 39130 mg/l 48 h Static Mortality
POTASSIUM CHLORIDE	7447-40-7	Nematode ( <i>Caenorhabditis elegans</i> ) 29960 mg/l 48 h Static Mortality
POTASSIUM CHLORIDE	7447-40-7	Nematode ( <i>Caenorhabditis elegans</i> ) 29854 mg/l 24 h Static Mortality
POTASSIUM CHLORIDE	7447-40-7	Nematode ( <i>Caenorhabditis elegans</i> ) 42049 mg/l 24 h Static Mortality
POTASSIUM CHLORIDE	7447-40-7	Nematode ( <i>Caenorhabditis elegans</i> ) 29839 mg/l 24 h Static Mortality
POTASSIUM CHLORIDE	7447-40-7	Diatom ( <i>Nitzschia linearis</i> ) 1337 mg/l 5 d Static Mortality

### Environmental effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

### Persistence and degradability

Not available.

## 13. Disposal Considerations

<b>Disposal instructions</b>	Wash to drains with lots of water. This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose in accordance with all applicable regulations.
<b>Waste from residues / unused products</b>	Not applicable.

## 14. Transport Information

### DOT

Not regulated as dangerous goods.

## 15. Regulatory Information

<b>US federal regulations</b>	This product is not known to be 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)

<b>Hazard categories</b>	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
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**Section 302 extremely hazardous substance** No

**Section 311 hazardous chemical** No

### Inventory status

<b>Country(s) or region</b>	<b>Inventory name</b>	<b>On inventory (yes/no)*</b>
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 New and Existing Chemicals (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	No
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)

<b>State regulations</b>	This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.
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## 16. Other Information

**Further information** HMIS® is a registered trade and service mark of the NPCA.

**HMIS® ratings**  
Health: 1  
Flammability: 0  
Physical hazard: 0

**NFPA ratings**  
Health: 0  
Flammability: 0  
Instability: 0

**Disclaimer**

The information in the sheet was written based on the best knowledge and experience currently available. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**Issue date**

24-May-2010

**This data sheet contains changes from the previous version in section(s):**

This document has undergone significant changes and should be reviewed in its entirety.