KOCH.

SAFETY DATA SHEET

1. Identification

Product identifier Potassium Chloride

Other means of identification

SDS Number KF_KCI_US_EN

Synonyms Potash * Muriate of Potash (MOP) * Potassium Muriate * Potassium Monochloride

Recommended use Fertilizer Coating **Recommended restrictions** None known.

Manufacturer/Importer/Supplier/Distributor information

Company Name Koch Fertilizer, LLC

4111 E 37th Street North

PO Box 2219

Wichita, KS, 67201-2219 kochmsds@kochind.com

1-316-828-7672

Emergency For Chemical Emergency

Call CHEMTREC day or night

1.800.424.9300

Mexico - 1.800.681.9531 Outside USA/Canada 1.703.527.3887

(collect calls accepted)

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.
Signal word None.

Hazard statement The mixture does not meet the criteria for classification.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Wash hands after handling.

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information

Not applicable.

3. Composition/information on ingredients

Mixtures

| Chemical name | CAS number | % |
|--------------------|------------|---------|
| Potassium chloride | 7447-40-7 | 95-99.5 |
| Sodium chloride | 7647-14-5 | 0.3-3.7 |

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Composition comments

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

This Safety Data Sheet is not a guarantee of product specification or NPK value(s). NPK content is on specified sales orders, customer invoices, or product specification sheets obtained from supplier.

4. First-aid measures

Inhalation

If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.

Skin contact

Wash off with plenty of water. Get medical attention promptly if symptoms persist or occur after

washing.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if

irritation develops and persists.

Symptoms include redness, itching and pain.

Ingestion

If ingestion of a large amount occurs, call a poison control center immediately. Do not give anything by mouth to an unconscious person. Get medical attention if any discomfort occurs.

Most important

symptoms/effects, acute and

delayed

Indication of immediate medical attention and special treatment needed

Treat symptomatically.

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

The product is non-combustible. Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing

media

None known.

Specific hazards arising from

the chemical

None known.

Special protective equipment and precautions for firefighters Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus, operated in positive pressure mode and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions Use standard firefighting procedures and consider the hazards of other involved materials. Cool material exposed to heat with water spray and remove it if no risk is involved.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid inhalation of dust and contact with skin and eyes. Ensure adequate ventilation. Wear suitable protective clothing. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Stop the flow of material, if this is without risk. Prevent entry into waterways, sewer, basements or confined areas. Avoid dust formation. Sweep up or vacuum up spillage and collect in suitable container for disposal. If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. After removal flush contaminated area thoroughly with water.

Never return spills to original containers for re-use.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not contaminate water. Do not allow to enter drains, sewers or watercourses.

7. Handling and storage

Precautions for safe handling

Avoid generation and spreading of dust. Avoid inhalation of dust and contact with skin and eyes. Use only with adequate ventilation. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Store in a cool, dry, well-ventilated place. Store away from incompatible materials.

8. Exposure controls/personal protection

Occupational exposure limits

No exposure limits noted for ingredient(s).

Biological limit values

No biological exposure limits noted for the ingredient(s).

Potassium Chloride SDS US Appropriate engineering

controls

Provide adequate general and local exhaust ventilation. Observe occupational exposure limits and

minimize the risk of inhalation of dust and fumes.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear approved safety glasses or goggles.

Skin protection

Hand protection Risk of contact: Wear protective gloves. Suitable gloves can be recommended by the glove

supplier.

Other No skin protection is ordinarily required under normal conditions of use. In accordance with good

industrial hygiene practices, precautions should be taken to avoid skin contact.

If engineering controls do not maintain airborne concentrations below recommended exposure Respiratory protection

limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Wear air supplied respiratory protection if exposure concentrations are unknown. In case of inadequate ventilation or risk of inhalation of dust, use suitable respiratory equipment with particle filter. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA 29 CFR

1910.134 and ANSI Z88.2.

Thermal hazards Not applicable.

General hygiene considerations

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. Handle in accordance with good industrial hygiene and safety

practice.

9. Physical and chemical properties

Crystalline or granular. **Appearance**

Solid. Physical state Solid. **Form**

Color White to reddish-brown

Odor None.

Odor threshold Not applicable.

5.4 - 10 (5% solution) pН

Melting point/freezing point Not available. Initial boiling point and boiling Not applicable.

range

Flash point Not applicable. Not available. **Evaporation rate** Flammability (solid, gas) Not available. Upper/lower flammability or explosive limits

Flammability limit - lower

Not applicable.

(%)

Flammability limit - upper

Not applicable.

(%)

Not available. Vapor pressure 2.57 (Air = 1)Vapor density Relative density Not available.

Solubility(ies)

99.5 - 100 % Solubility (water) Not available. Partition coefficient

(n-octanol/water)

Not available. **Auto-ignition temperature Decomposition temperature** Not available. **Viscosity** Not available.

Other information

64 - 75 lb/ft3 **Bulk density**

10. Stability and reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport. Reactivity

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Chemical stability Stable at normal conditions. The substance is hygroscopic and will absorb water by contact with

the moisture in the air.

Possibility of hazardous

reactions

Hazardous polymerization does not occur.

Contact with incompatible materials. (Strong acids, oxidizers, nitric acid and sulfuric acid). Conditions to avoid

Incompatible materials Strong acids. Oxidizers, nitric acid and sulfuric acid.

Hazardous decomposition

products

None known.

11. Toxicological information

Information on likely routes of exposure

Inhalation Dust may irritate respiratory system.

Skin contact Prolonged skin contact may cause irritation.

Dust may irritate the eyes. Eye contact

Ingestion Ingestion may cause irritation and malaise.

Symptoms related to the physical, chemical and toxicological characteristics Symptoms include itching, burning, redness, and tearing of eyes.

Information on toxicological effects

May cause discomfort if swallowed. **Acute toxicity**

Components **Species Test Results**

Potassium chloride (CAS 7447-40-7)

Acute Oral

LD50 Rat 2600 mg/kg

Sodium chloride (CAS 7647-14-5)

Acute Dermal

LD50 Rabbit > 10000 mg/kg

Inhalation

LC50 Rat > 42 mg/l, 1 Hours

Oral

LD50 Rat 3550 mg/kg

Skin corrosion/irritation May cause irritation through mechanical abrasion. Serious eye damage/eye

irritation

May cause irritation through mechanical abrasion.

Respiratory or skin sensitization

Respiratory sensitization No data available. Skin sensitization No data available. Germ cell mutagenicity No data available.

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

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

No data available. Reproductive toxicity No data available. Specific target organ toxicity -

single exposure

No data available.

Specific target organ toxicity -

repeated exposure

Not available. **Aspiration hazard**

Chronic effects Prolonged exposure may cause chronic effects.

Further information No other specific acute or chronic health impact noted.

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12. Ecological information

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

| Components | | Species | Test Results |
|----------------------------|------------|---|------------------------------|
| Potassium chloride (CAS 74 | 47-40-7) | | |
| Aquatic | | | |
| Crustacea | EC50 | Water flea (Daphnia magna) | 149 mg/l, 48 hours |
| Fish | LC50 | Western mosquitofish (Gambusia affinis) | 435 mg/l, 96 hours |
| Sodium chloride (CAS 7647- | 14-5) | | |
| Aquatic | | | |
| Crustacea | EC50 | Water flea (Daphnia magna) | 340.7 - 469.2 mg/l, 48 hours |
| Fish | LC50 | Bluegill (Lepomis macrochirus) | 1294.6 mg/l, 96 hours |
| sistence and degradability | No data is | available on the degradability of this product. | |

Persistence and degradability

Bioaccumulative potential

Mobility in soil

No data is available on the degradability of this product bioconcentrate or bioaccumulate.

This product is water soluble and may disperse in soil.

Other adverse effects No data available.

13. Disposal considerations

Disposal instructionsDo not allow this material to drain into sewers/water supplies. Dispose in accordance with all

applicable regulations.

Hazardous waste codeThe waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

Contaminated packaging Since emptied containers may 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.

Transport in bulk according to Annex II of MARPOL 73/78 and

Not applicable.

the IBC Code

15. Regulatory information

US federal regulations This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard

Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No

Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

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SARA 311/312 Hazardous No

chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

(SDWA)

Not regulated.

US state regulationsThis product does not contain a chemical known to the State of California to cause cancer, birth

defects or other reproductive harm.

US. Massachusetts RTK - Substance List

Not regulated.

US. New Jersey Worker and Community Right-to-Know Act

Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

Not Listed.

International Inventories

Country(s) or region Inventory name On inventory (yes/no)*

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

Yes

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*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 04-March-2015

Revision date - 01

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

HMIS® ratings Health: 1

Flammability: 0 Physical hazard: 0

NFPA ratings



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Disclaimer

NOTICE: The information presented herein is based on data considered to be accurate as of the date of preparation of this Safety Data Sheet (SDS) and was prepared pursuant to Government regulation(s) that identify specific types of information to be provided. This SDS may not be used as a commercial specification sheet of manufacturer or seller, and no warranty or representation, expressed or implied, is made as to the accuracy or comprehensiveness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented invention without a license. Additional information may be needed to evaluate other uses of the product, including use of the product in combination with any materials or in any processes other than those specifically referenced. Information provided herein with respect to any hazards that may be associated with the product is not meant to suggest that use of the product in a given application will necessarily result in any exposure or risk to workers or the general public. No responsibility can be assumed by vendor for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the product. Purchasers and users assume all risk of use, storage and handling of the product in compliance with applicable federal, state and local laws and regulations. Purchasers and users of the product specifically should advise all of their employees, agents, contractors and customers who will use the product of this (M)SDS.

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