K KOCH. **FERTILIZER**

SAFETY DATA SHEET

1. Identification

Product identifier Potash

Other means of identification

SDS Number KF Potash US EN

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

Chloride * Muriate of Potash 0-0-60 * Muriate of Potash 0-0-62

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. None. Signal word

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

Precautionary statement

Observe good industrial hygiene practices. Prevention

Wash hands after handling. Response

Store away from incompatible materials. Storage

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 - 3.7

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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

Ingestion

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

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 **General information** Treat symptomatically.

Symptoms include redness, itching and pain.

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).

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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.

Skin protection

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.

Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure 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

Appearance Crystalline or granular.

Physical state Solid.
Form Solid.

Color White to reddish-brown

Odor None.

Odor threshold Not applicable.

pH 5.4 - 10 (5% solution)

Melting point/freezing point Initial boiling point and boiling

range

Not available.

Not applicable.

Flash point Not applicable.

Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Not applicable.

Flammability limit - upper

(%)

Not applicable.

Vapor pressureNot available.Vapor density2.57 (Air = 1)Relative densityNot available.

Solubility(ies)

Solubility (water) 99.5 - 100 %

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperatureNot available.Decomposition temperatureNot available.ViscosityNot available.

Other information

Bulk density 64 - 75 lb/ft³ **Explosive properties** Not explosive.

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Oxidizing properties Not oxidizing.

10. Stability and reactivity

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

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.

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

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.

Eye contact Dust may irritate the eyes.

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

Acute toxicity May cause discomfort if swallowed.

Components Species Test Results

Potassium chloride (CAS 7447-40-7)

<u>Acute</u>

Oral

LD50 Rat 3020 mg/kg

Sodium chloride (CAS 7647-14-5)

Acute

Dermal

LD50 Rabbit > 10000 mg/kg

Inhalation

Aerosol

LC50 Rat > 42 mg/l, 1 Hours

Oral

LD50 Rat 3550 mg/kg

Skin corrosion/irritation
Serious eye damage/eye

Serious eye irritation

May cause irritation through mechanical abrasion. 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.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

NTP Report on Carcinogens

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Reproductive toxicity No data available.

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Specific target organ toxicity -

single exposure

No data available.

Specific target organ toxicity -

repeated exposure

No data available.

Not available. **Aspiration hazard**

Prolonged exposure may cause chronic effects. **Chronic effects**

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

12. Ecological information

The product is not classified as environmentally hazardous. However, this does not exclude the **Ecotoxicity**

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components Species **Test Results** Potassium chloride (CAS 7447-40-7) 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 340.7 - 469.2 mg/l, 48 hours Water flea (Daphnia magna) Fish LC50 Bluegill (Lepomis macrochirus) 1294.6 mg/l, 96 hours

Persistence and degradability No data is available on the degradability of this product. Bioaccumulative potential Not expected to bioconcentrate or bioaccumulate. This product is water soluble and may disperse in soil. Mobility in soil

Other adverse effects No data available.

13. Disposal considerations

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

applicable regulations.

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

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.

Since emptied containers may retain product residue, follow label warnings even after container is Contaminated packaging

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

Not applicable.

Annex II of MARPOL 73/78 and

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 regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

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Superfund Amendments and Reauthorization Act of 1986 (SARA)

Immediate Hazard - No **Hazard categories**

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

SARA 302 Extremely hazardous substance

Not listed.

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

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

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

US state regulations

This 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

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

Not listed.

US. Rhode Island RTK

Not regulated.

International Inventories

On inventory (yes/no)* Country(s) or region Inventory name Canada Domestic Substances List (DSL) Yes Canada Non-Domestic Substances List (NDSL) No United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory Yes

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

Issue date 26-January-2017

Revision date Version # 01

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

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

Physical hazard: 0

NFPA ratings

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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).

Disclaimer

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