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## OptiSource

OptiSource SAFETY DATA SHEET Revision Date 03/07/2015

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name** : Crown Salt

**Other means of Identification** : 27-CROWN16, 27-photo2, 27-photo16, 27-crown16

**Brand** : OptiSource International

**Identified uses** : Laboratory chemicals, Manufacture of substances

**Restrictions on use**: Only use in recommended manner

**Company** : OptiSource International

40 Sawgrass Dr

Bellport NY, 11713

**Telephone** : +1 631-924-8360

**24 hour emergency number**: +1-703-527-3887

### 2. HAZARDS IDENTIFICATION

**Classification of the substance or mixture**

Oxidizing solids (Category 3): May intensify fire; oxidizer



**Signal word**: Warning

**Precautionary statement(s)**

Keep away from heat.

Keep/Store away from clothing/ combustible materials.

Take any precaution to avoid mixing with combustibles.

Avoid release to the environment.

Wear protective gloves/ protective clothing/ eye protection/ face protection.

In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Dispose of contents/ container to an approved waste disposal plant.

**Hazards not otherwise classified (HNOC) or not covered by GHS** - none

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substances**

Formula : KNO (Potassium Nitrate) 99.5%

3 Molecular Weight : 101.10 g/mol CAS-No. : 7757-79-1 EC-No. : 231-818-8

Remaining .5% of ingredients not considered hazardous under 29CFR

### 4. FIRST AID MEASURES

**Description of first aid measures**

**General advice:** Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**If inhaled** move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact** Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact** Flush eyes with water as a precaution.

**If swallowed** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**The most important known symptoms and effects** are described in the labeling (see section 2.2) and/or in section 11

**Indication of any immediate medical attention and special treatment needed**

no data available

**5. FIREFIGHTING MEASURES**

**Suitable extinguishing media** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special hazards arising from the substance or mixture**

nitrogen oxides (NOx), Potassium oxides

**Advice for firefighters**

In case of fire, use normal fire fighting equipment including a NIOSH approved self-contained breathing apparatus. Use water to cool containers

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**Methods and materials for containment and cleaning up**

Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

**Reference to other sections**

For disposal see section 13.

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking. Keep away from heat and sources of ignition. Normal measures for preventive fire protection. For precautions see section 2.2.

**Conditions for safe storage, including any incompatibilities**

Keep container tightly closed in a dry and well-ventilated place.

Store under inert gas.

**Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Components with workplace control parameters** Contains no substances with occupational exposure limit values.

**Exposure controls**

Appropriate engineering controls Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection** Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min  
Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min  
Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection** impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection** Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

- a) **Appearance Form:** crystalline Color: white
- b) **Odor:** no data available
- c) **Odor Threshold:** no data available
- d) **pH** 5.5 - 8 at 50 g/l at 20 °C (68 °F)
- e) **Melting point/freezing point:** Melting point/range: 334 °C (633 °F) - lit.
- f) **Initial boiling point and boiling range:** no data available
- g) **Flash point:** no data available
- h) **Evaporation rate:** no data available
- i) **Flammability (solid, gas):** no data available
- j) **Upper/lower flammability or explosive limits:** no data available
- k) **Vapour pressure:** no data available
- l) **Vapour density:** no data available
- m) **Relative density:** 2.109 g/cm<sup>3</sup>
- n) **Water solubility:** no data available
- o) **Partition coefficient:** n-octanol/water no data available
- p) **Auto-ignition temperature:** no data available
- q) **Decomposition temperature:** no data available
- r) **Viscosity:** no data available
- s) **Explosive properties:** no data available
- t) **Oxidizing properties:** The substance or mixture is classified as oxidizing with the category 3.

### Other safety information

Bulk density 800 kg/m<sup>3</sup>

## 10. STABILITY AND REACTIVITY

**Reactivity** Will react with incompatible materials listed below.

**Chemical stability:** Stable under recommended storage conditions.

**Possibility of hazardous reactions** no data available

**Conditions to avoid** no data available

**Incompatible materials** Strong reducing agents, Powdered metals, Strong acids, Organic materials

**Hazardous decomposition products** Other decomposition products - no data available In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

### 11. Information on toxicological effects

**Acute toxicity LD50 Oral** - rat - 3,750 mg/kg

**Inhalation:** no data available

**Dermal:** no data available

**Skin corrosion/irritation** no data available

**Serious eye damage/eye irritation** no data available

**Respiratory or skin sensitisation** no data available

**Germ cell mutagenicity** no data available

### **Carcinogenicity**

IARC: 2A - Group 2A: Probably carcinogenic to humans (Potassium nitrate)

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

### **Reproductive toxicity no data available**

Reproductive toxicity - rat - Oral Effects on Fertility: Other measures of fertility

Reproductive toxicity - rat - Oral Effects on Newborn: Behavioral.

Reproductive toxicity - rabbit - Oral Effects on Fertility: Abortion.

Reproductive toxicity - guinea pig – Oral Effects on Newborn: Stillbirth.

Reproductive toxicity - guinea pig - Oral Effects on Fertility: Female fertility index (e.g., # females pregnant per # sperm positive females; # females pregnant per # females mated ). Effects on Embryo or Fetus:

Other effects to embryo.

no data available

**Specific target organ toxicity - single exposure no data available**

**Specific target organ toxicity - repeated exposure no data available**

**Aspiration hazard no data available**

### **Additional Information RTECS: TT3700000**

Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer.

Liver - Irregularities - Based on Human Evidence Liver - Irregularities - Based on Human Evidence

## 12. ECOLOGICAL INFORMATION

**Toxicity** Toxicity to fish LC50 - *Gambusia affinis* (Mosquito fish) - 22.5 mg/l - 96 h

static test LC50 - *Poecilia reticulata* (guppy) - 1,378 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates

EC50 - *Daphnia magna* (Water flea) - 226 mg/l - 72 h

**Persistence and degradability** no data available

**Bioaccumulative potential** no data available

**Mobility in soil** no data available

**Results of PBT and vPvB assessment** PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**Other adverse effects** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life.

## 13. DISPOSAL CONSIDERATIONS

### **Waste treatment methods**

Product Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging Dispose of as unused product.

**14. TRANSPORT INFORMATION**

DOT (US) UN number: 1486 Class: 5.1 Packing group: III

Proper shipping name: Potassium nitrate Marine pollutant: No Poison Inhalation Hazard: No

IMDG UN number: 1486 Class: 5.1 Packing group: III EMS-No: F-A, S-Q Proper shipping name: POTASSIUM NITRATE Marine pollutant: No

IATA UN number: 1486 Class: 5.1 Packing group: III Proper shipping name: Potassium nitrate

**15. REGULATORY INFORMATION**

SARA 302 Components SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components The following components are subject to reporting levels established by SARA Title III, Section 313:

Potassium nitrate

CAS-No. 7757-79-1

Revision Date 2007-03-01

SARA 311/312 Hazards Reactivity Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

Potassium nitrate

CAS-No. 7757-79-1

Revision Date 06/21/2022

**Pennsylvania Right To Know Components**

Potassium nitrate

CAS-No. 7757-79-1

Revision Date 06/21/2022

**New Jersey Right To Know Components**

Potassium nitrate

CAS-No. 7757-79-1

Revision Date 06/21/2022

California Prop. 65 Components This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**16. OTHER INFORMATION**

Issue Date: 06/21/2022

HMIS Rating Health hazard: 1 Chronic Health Hazard: \* Flammability: 0 Physical Hazard 1

NFPA Rating Health hazard: 0 Fire Hazard: 0 Reactivity Hazard: 1 Special hazard.I: OX

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