

# SAFETY DATA SHEET

Classified in accordance 29 CFR 1910.1200

## 1. Identification

**Product identifier:** Potassium Carbonate granular

### Other means of identification

**CAS Number:** 584-08-7

### Recommended restrictions

**Recommended use:** Inorganic intermediate

**Restrictions on use:** Not known.

### Distributor Information

Company Name : Energy Feeds International  
745 85th Ave, Suite A  
Oakland, CA 94621  
USA

Telephone : 877-255-2280

Fax : n/a

E-mail : support@energyfeeds.com

### Emergency telephone number:

24-Hour Health : +1 800 424 9300 (CHEMTREC - US & CANADA)

Emergency : +1 800 681 9531 (CHEMTREC MEXICO)

+1 703 527 3887 (CHEMTREC WORLD)

## 2. Hazard(s) identification

### Hazard Classification

#### Health Hazards

Skin irritation	Category 2
Serious eye irritation	Category 2A
Specific Target Organ Toxicity - Single Exposure	Category 3 <sup>1</sup>

#### Target Organs

1. Respiratory system

### Label Elements

#### Hazard Symbol:



<b>Signal Word:</b>	Warning
<b>Hazard Statement:</b>	Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.
<b>Precautionary Statements</b>	
<b>Prevention:</b>	Avoid breathing dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear eye protection/face protection. Wear protective gloves.
<b>Response:</b>	IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER/doctor if you feel unwell. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
<b>Storage:</b>	Store in a well-ventilated place. Keep container tightly closed. Store locked up.
<b>Disposal:</b>	Dispose of contents/ container to an approved waste disposal plant.
<b>Hazard(s) not otherwise classified (HNOC):</b>	None.

### 3. Composition/information on ingredients

#### Substances

Chemical Identity	CAS number	Content in percent (%) <sup>*</sup>
Potassium carbonate	584-08-7	99.5%

<sup>\*</sup> All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

A specific chemical identity and/or percentage of composition has been withheld as a trade secret.

### 4. First-aid measures

#### Description of necessary first-aid measures

<b>General information:</b>	Pay attention to self-protection. Remove victims from hazardous area. Immediately remove soiled or soaked clothing and remove it to a safe distance. Keep victim warm, in a stabilized position and covered. Do not leave victims unattended. If the casualty is unconscious: Place the victim in the recovery position.
<b>Inhalation:</b>	Inhalation is possible if aerosols, mists, dusts, or smoke form. Move victims into fresh air. With labored breathing: Provide with oxygen. Consult a doctor. If the casualty is not breathing: Perform mouth-to-mouth resuscitation, notify emergency physician immediately.

**Skin Contact:** Wash off affected area immediately with plenty of water for at least 15 minutes. With liposoluble substances, products, or preparations, continue decontamination with polyethylene glycol 400 after initial rinsing with water and then wash with water and soap. If symptoms persist, consult a physician for treatment.

**Eye contact:** With eye held open, thoroughly rinse immediately with plenty of water for at least 10 minutes. Consult an ophthalmologist immediately if the symptoms persist. When dealing with caustic substances, notify emergency physician immediately (key words: burns in eye).

**Ingestion:** Rinse mouth. Immediately give large quantities of water to drink. Obtain medical attention. When dealing with caustic substances, notify emergency physician immediately.

**Personal Protection for First-aid Responders:** Wear suitable protective clothing. As in any fire, wear self-contained positive-pressure breathing apparatus, (MSHA/NIOSH approved or equivalent) and full protective gear.

**Most important symptoms/effects, acute and delayed**

**Symptoms:** None known.

**Hazards:** No data available.

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

**Treatment:** No data available.

**5. Fire-fighting measures**

**Suitable (and unsuitable) extinguishing media**

**Suitable extinguishing media:** The product is non-combustible. In case of fire in the surroundings: Water spray, foam, CO2, dry powder.

**Unsuitable extinguishing media:** high volume water jet

**Specific hazards arising from the chemical:** The product itself does not burn.

**Special protective equipment and precautions for firefighters**

**Special fire fighting procedures:** Water for fire fighting must not be introduced in the sewer system, subsoil, or surface waters. Assure that there are sufficient fire water retaining facilities Contaminated fire fighting water must be disposed of in conformity with the regulations of the local authorities. Fire residues should be disposed of in accordance with the regulations.

**Special protective equipment for fire-fighters:** Wear suitable protective clothing. As in any fire, wear self-contained positive-pressure breathing apparatus, (MSHA/NIOSH approved or equivalent) and full protective gear.

**6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures:** Keep unauthorized personnel away.

<b>Methods and material for containment and cleaning up:</b>	Use mechanical handling equipment. After cleaning, flush away traces with water.
<b>Environmental Precautions:</b>	Prevent product from entering drains. Do not allow to reach the sewage system, the ground or natural water bodies. Obey relevant local, state, provincial and federal laws and regulations. Do not contaminate any lakes, streams, ponds, groundwater or soil.

<b>7. Handling and storage</b>
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**Handling**

<b>Technical measures (e.g. Local and general ventilation):</b>	No data available.
<b>Safe handling advice:</b>	Avoid residues of the product on the containers. Avoid dust formation. Wear personal protective equipment; see section 8. Handle in accordance with good industrial hygiene and safety practice. A safety shower and eye wash fountain should be readily available. To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29CFR1910.132) be conducted before using this product.
<b>Contact avoidance measures:</b>	No data available.
<b>Hygiene measures:</b>	Avoid contact with skin and eyes. Wash off immediately in the event of contact with the skin (rinsing agent: glycol polyethylene 400), rinse off afterwards with copious amounts of water. Do not eat, drink, smoke, or sniff while at work. Wash your hands and/or face before breaks and before termination of work. Take off clothing and shoes contaminated with product. Clean before reuse. Avoid dust formation.

**Storage**

<b>Safe storage conditions:</b>	In order to ensure due transportation, make certain that stacks are of the correct height, containers are securely fastened so as not to fall off, and labelled according to the regulations. Store in the original receptacle, keeping this tightly sealed, under cool and dry conditions. Inadequate materials are: Copper Light metals brass No special precautions.
<b>Safe packaging materials:</b>	No data available.

<b>8. Exposure controls/personal protection</b>
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**Control Parameters**

**Occupational Exposure Limits**

None of the components have assigned exposure limits.

**Appropriate Engineering Controls**

No data available.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection:**

Wear safety glasses with side shields. In case dusts are formed, wear close fitting protective goggles.

**Skin Protection**

- Hand Protection:** Material: Nitrile/Chloroprene  
Guideline: DIN EN 374  
Additional Information: Applies to handling for longer periods or of large amounts  
Material: Nitrile.  
Guideline: DIN EN 374  
Material: The material thickness and rupture time data do not apply to non-solute solids / dusts.  
Material: Remember that the useful time per day of a chemical protection glove may be much shorter than the permeation time determined according to EN 374 due to the many different influential factors involved (e.g. temperature).  
Additional Information: The above mentioned hand protection is based on knowledge of the chemistry and anticipated uses of this product but it may not be appropriate for all workplaces. A hazard assessment should be conducted prior to use to ensure suitability of gloves for specific work environments and processes prior to use.  
Additional Information: Use impermeable gloves.
- Skin and Body Protection:** Select materials and equipment for physical protection depending on the concentration and volume of hazardous substances and the workplace involved.
- Respiratory Protection:** in case of occurrence of dusts use respiratory equipment with suitable filter or wear a self contained respiratory apparatus Do not inhale dust, use particle filter P1 or P2 Note time limit for wearing respiratory protective equipment. A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal/provincial requirements must be followed whenever workplace conditions warrant respirator use. NIOSH's "Respirator Decision Logic" may be useful in determining the suitability of various types of respirators.
- Hygiene measures:** Avoid contact with skin and eyes. Wash off immediately in the event of contact with the skin (rinsing agent: glycol polyethylene 400), rinse off afterwards with copious amounts of water. Do not eat, drink, smoke, or sniff while at work. Wash your hands and/or face before breaks and before termination of work. Take off clothing and shoes contaminated with product. Clean before reuse. Avoid dust formation.

<b>9. Physical and chemical properties</b>
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**Appearance**

<b>Physical state:</b>	solid
<b>Form:</b>	granular
<b>Color:</b>	White
<b>Odor:</b>	odourless
<b>Odor Threshold:</b>	No data available.
<b>pH:</b>	Not applicable
<b>Melting Point:</b>	891 °C
<b>Boiling Point:</b>	Not applicable
<b>Flash Point:</b>	Not applicable
<b>Evaporation Rate:</b>	Not applicable
<b>Flammability (solid, gas):</b>	not to be expected, given the composition employed not pyrophoric
<b>Explosive limit - upper (%):</b>	No data available.
<b>Explosive limit - lower (%):</b>	No data available.
<b>Vapor pressure:</b>	Not applicable
<b>Vapor density (air=1):</b>	No data available.
<b>Density:</b>	approx. 2.4 g/cm <sup>3</sup> (20 °C)

<b>Relative density:</b>	No data available.
<b>Solubility(ies)</b>	
<b>Solubility in Water:</b>	of very high solubility 1,100 g/l (20 °C)
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	Not applicable
<b>Self Ignition Temperature:</b>	no autoignition below 400°C
<b>Decomposition Temperature:</b>	No data available.
<b>Kinematic viscosity:</b>	No data available.
<b>Dynamic viscosity:</b>	Not applicable
<b>Other information</b>	
<b>Explosive properties:</b>	Not to be expected in view of the structure
<b>Oxidizing properties:</b>	Not to be expected in view of the structure
<b>Minimum ignition temperature:</b>	Not applicable
<b>Metal Corrosion:</b>	No risk of corrosion if moisture is excluded.

## 10. Stability and reactivity

<b>Reactivity:</b>	No further information available
<b>Chemical Stability:</b>	Stable under recommended storage conditions.
<b>Possibility of hazardous reactions:</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid:</b>	No further information available
<b>Incompatible Materials:</b>	acids
<b>Hazardous Decomposition Products:</b>	No further information available

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation:</b>	Relevant route of exposure. Information on effects are given below.
<b>Skin Contact:</b>	Relevant route of exposure. Information on effects are given below.
<b>Eye contact:</b>	Relevant route of exposure. Information on effects are given below.
<b>Ingestion:</b>	If handled correctly, not a relevant route of exposure. Information on effects are given below.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Inhalation:</b>	Relevant route of exposure. Information on effects are given below.
<b>Skin Contact:</b>	Relevant route of exposure. Information on effects are given below.
<b>Eye contact:</b>	Relevant route of exposure. Information on effects are given below.
<b>Ingestion:</b>	If handled correctly, not a relevant route of exposure. Information on effects are given below.

**Information on toxicological effects****Acute toxicity (list all possible routes of exposure)****Oral****Product:** LD 50 (Rat): > 2,000 mg/kg No deaths observed.**Dermal****Product:** LD 50 (Rabbit): > 2,000 mg/kg No deaths observed.**Inhalation****Product:** > 4.96 mg/l Irritating., Dust, No deaths observed., literature**Repeated dose toxicity****Product:** No data available.**Skin Corrosion/Irritation****Product:** Not irritating FDA, Appraisal of the Safety of Chemicals in Food, Drugs and Cosmetics, 1959 (Rabbit, 24 h): Not irritating  
Skin irritation Skin irritation Based on experience in human subjects**Serious Eye Damage/Eye Irritation****Product:** very markedly irritating Rabbit: very markedly irritating  
Serious eye irritation Serious eye irritation Based on experience in human subjects**Respiratory or Skin Sensitization****Product:** Buehler Test, US-EPA-method (Guinea Pig): Not a skin sensitizer. literature**Carcinogenicity****Product:** Contains no carcinogenic substances as defined by NTP, IARC and/or OSHA.**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:****US. National Toxicology Program (NTP) Report on Carcinogens:****US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):****Germ Cell Mutagenicity****In vitro****Product:** Ames test (OECD TG 471): negative literature  
Genetic mutation in mammal cells (OECD TG 476): negative literature  
Chromosomal aberration (OECD TG 473): negative literature**In vivo****Product:** No data available.**Reproductive toxicity****Product:** No data available.**Specific Target Organ Toxicity - Single Exposure****Product:** May cause respiratory irritation.

**Specific Target Organ Toxicity - Repeated Exposure**

**Product:** No data available.

**Aspiration Hazard**

**Product:** No data available.

**Other effects:** No data available.

**12. Ecological information**

**Ecotoxicity:**

**Acute hazards to the aquatic environment:**

**Fish**

**Product:** LC 50 (Oncorhynchus mykiss, 96 h): 68 mg/l literature  
NOEC (Oncorhynchus mykiss, 96 h): 33 mg/l literature

**Aquatic Invertebrates**

**Product:** EC 50 (Daphnia pulex (Water flea), 48 h): 200 mg/l literature  
NOEC (Daphnia pulex (Water flea), 48 h): 120 mg/l literature

**Chronic hazards to the aquatic environment:**

**Fish**

**Product:** No data available.

**Aquatic Invertebrates**

**Product:** No data available.

**Toxicity to Aquatic Plants**

**Product:** No data available.

**Persistence and Degradability**

**Biodegradation**

**Product:** The methods for determining biodegradability are not applicable to inorganic substances.

**BOD/COD Ratio**

**Product:** No data available.

**Bioaccumulative potential**

**Bioconcentration Factor (BCF)**

**Product:** No data available.

**Partition Coefficient n-octanol / water (log Kow)**

**Product:** Log Kow: Not applicable

**Mobility in soil:**

No data available.



**Other adverse effects:** No data available.

### 13. Disposal considerations

**Disposal methods:** Waste must be disposed of in accordance with federal, state, provincial and local regulations. Since empty containers retain product residue, follow MSDS and label warnings even after container is emptied.

**Contaminated Packaging:** Do not reuse empty containers and dispose of in accordance with the regulations issued by the appropriate local authorities. Packaging material should be recycled or disposed of in accordance with federal, state and local regulations.

### 14. Transport information

#### Domestic regulation

##### 49 CFR

Not regulated as a dangerous good

Remarks : Not dangerous according to transport regulations.

#### International Regulations

##### UNRTDG

Not regulated as a dangerous good

##### IATA-DGR

Not regulated as a dangerous good

##### IMDG-Code

Not regulated as a dangerous good

#### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

### 15. Regulatory information

#### US Federal Regulations

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

None present or none present in regulated quantities.

##### US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)

None present or none present in regulated quantities.

##### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

**CERCLA Hazardous Substance List (40 CFR 302.4):**

None present or none present in regulated quantities.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**

Skin Corrosion or Irritation, Serious eye damage or eye irritation, Specific target organ toxicity (single or repeated exposure)

**SARA 302 Extremely Hazardous Substance**

None present or none present in regulated quantities.

**US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances**

**SARA 311/312 Hazardous Chemical**

Chemical Identity                      Threshold Planning Quantity

**SARA 313 (TRI Reporting)**

None present or none present in regulated quantities.

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

None present or none present in regulated quantities.

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)**

None present or none present in regulated quantities.

**US State Regulations**

**US. California Proposition 65**

No ingredient requiring a warning under CA Prop 65.

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

No ingredient regulated by NJ Right-to-Know Law present.

**US. Massachusetts RTK - Substance List**

No ingredient regulated by MA Right-to-Know Law present.

**US. Pennsylvania RTK - Hazardous Substances**

No ingredient regulated by PA Right-to-Know Law present.

**US. Rhode Island RTK**

No ingredient regulated by RI Right-to-Know Law present.

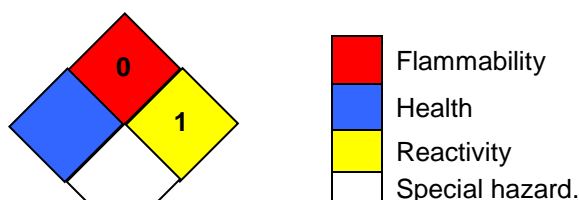
**Inventory Status:**

Australia AICS:	On or in compliance with the inventory
Canada DSL Inventory List:	On or in compliance with the inventory
Canada NDSL Inventory:	Not in compliance with the inventory.
Ontario Inventory:	On or in compliance with the inventory
China Inv. Existing Chemical Substances:	On or in compliance with the inventory
Japan (ENCS) List:	On or in compliance with the inventory
Japan ISHL Listing:	On or in compliance with the inventory
Japan Pharmacopoeia Listing:	On or in compliance with the inventory
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory
Mexico INSQ:	On or in compliance with the inventory
New Zealand Inventory of Chemicals:	On or in compliance with the inventory
Philippines PICCS:	On or in compliance with the inventory
Taiwan Chemical Substance Inventory:	On or in compliance with the inventory
US TSCA Inventory:	On or in compliance with the inventory
EINECS, ELINCS or NLP:	On or in compliance with the inventory

**16. Other information, including date of preparation or last revision**
**HMIS Hazard ID**

<b>Health</b>		2
<b>Flammability</b>		0
<b>Physical Hazards</b>		1
<b>PERSONAL PROTECTION</b>		

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; \*Chronic health effect

**NFPA Hazard ID**


Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible

**Issue Date:** 06/19/2019

**Version #:** 1.1

**Further Information:** No data available.

**Revision Information:** Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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