



# K-Minus™ Dense Granular Potassium Carbonate

## Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations  
Revision Date: 07/14/2015 Date of issue: 07/14/2015 Supersedes Date: 02/24/2014

Version: 1.0

### SECTION 1: IDENTIFICATION

#### Product Identifier

**Product Form:** Substance

**Product Name:** K-Minus™ Dense Granular Potassium Carbonate

**CAS No:** 584-08-7

**Formula:** K<sub>2</sub>CO<sub>3</sub>

**Synonyms:** Potash, PotCarb, Pearlash

#### Intended Use of the Product

Feed Ingredient.

#### Name, Address, and Telephone of the Responsible Party

##### **Company**

Church & Dwight  
500 Charles Ewing Blvd  
Ewing Township, NJ 08628  
T 1-800-526-3563

[www.churchdwight.com](http://www.churchdwight.com)

#### Emergency Telephone Number

**Emergency Number** : For Medical Emergency: 1-888-234-1828, For Chemical Emergency: 1-800-424-9300 (CHEMTREC)

### SECTION 2: HAZARDS IDENTIFICATION

#### Classification of the Substance or Mixture

##### **Classification (GHS-US)**

Acute Tox. 4 (Oral) H302

Skin Irrit. 2 H315

Eye Dam. 1 H318

STOT SE 3 H335

#### Label Elements

##### **GHS-US Labeling**

##### **Hazard Pictograms (GHS-US)**



GHS07

##### **Signal Word (GHS-US)**

: Warning

##### **Hazard Statements (GHS-US)**

: H302 - Harmful if swallowed.  
H315 - Causes skin irritation.  
H318 - Causes serious eye damage.  
H335 - May cause respiratory irritation.

##### **Precautionary Statements (GHS-US)**

: P261 - Avoid breathing dust, fume.  
P264 - Wash hands, forearms, and exposed areas thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P271 - Use only outdoors or in a well-ventilated area.  
P280 - Wear protective clothing, protective gloves, eye protection.  
P301+P312 - IF SWALLOWED: Call POISON CENTER/doctor if you feel unwell.  
P302+P352 - IF ON SKIN: Wash with plenty of water.  
P304+P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

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contact lenses, if present and easy to do. Continue rinsing.  
P310 - Immediately call POISON CENTER/doctor.  
P321 - Specific treatment (see Section 4).  
P330 - Rinse mouth.  
P332+P313 - If skin irritation occurs: Get medical advice/attention.  
P337+P313 - If eye irritation persists: Get medical advice/attention.  
P362 - Take off contaminated clothing and wash before reuse.  
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.  
P405 - Store locked up.  
P501 - Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

**Other Hazards** Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

**Unknown Acute Toxicity (GHS-US)** Not available

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### Substances

Name : Potassium Carbonate  
CAS No : 584-08-7

Name	Product Identifier	% (w/w)	Classification (GHS-US)
Potassium carbonate	(CAS No) 584-08-7	100	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335

Full text of H-phrases: see section 16

### SECTION 4: FIRST AID MEASURES

#### Description of First Aid Measures

**General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice.

**Inhalation:** When symptoms occur: go into open air and ventilate suspected area. Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor/physician if you feel unwell.

**Skin Contact:** Brush off loose particles from skin. Rinse immediately with plenty of water (for at least 15 minutes). Obtain medical attention if irritation develops or persists. Wash contaminated clothing before reuse.

**Eye Contact:** Do not rub. Rinse eyes thoroughly with water for at least 15 minutes, including under lids, to remove all particles. Seek medical attention for abrasions. Remove contact lenses, if present and easy to do. Continue rinsing.

**Ingestion:** Seek medical attention if a large amount is swallowed. Rinse mouth. Do NOT induce vomiting. If vomiting occurs have person lean forward.

#### Most Important Symptoms and Effects Both Acute and Delayed

**General:** Causes irritation. Causes eye damage. Harmful if swallowed.

**Inhalation:** May cause respiratory irritation. May cause pulmonary edema.

**Skin Contact:** Causes skin irritation.

**Eye Contact:** Causes serious eye damage.

**Ingestion:** Harmful if swallowed. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

**Chronic Symptoms:** None expected under normal conditions of use.

#### Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention.

### SECTION 5: FIRE-FIGHTING MEASURES

#### Extinguishing Media

**Suitable Extinguishing Media:** Use extinguishing media appropriate for surrounding fire.

**Unsuitable Extinguishing Media:** For surrounding fire. Use of heavy stream of water may spread fire.

#### Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Not flammable. Under fire conditions, hazardous fumes will be present.

**Explosion Hazard:** Product is not explosive.

**Reactivity:** Hazardous reactions will not occur under normal conditions. Reacts violently with acids and chlorine trifluoride.

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### Advice for Firefighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire.

**Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection. Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe.

**Hazardous Combustion Products:** Potassium oxides.

### Reference to Other Sections

Refer to section 9 for flammability properties.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Do not breathe dust or fumes. Avoid skin and eye contact. Handle in accordance with good industrial hygiene and safety practice.

#### For Non-Emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

#### For Emergency Personnel

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Ventilate area.

**Environmental Precautions** Avoid release to the environment.

### Methods and Material for Containment and Cleaning Up

**For Containment:** Contain and collect as any solid.

**Methods for Cleaning Up:** Avoid generation of dust during clean-up of spills. Keep in suitable, closed containers for disposal. Contact competent authorities after a spill. Clear up spills immediately and dispose of waste safely.

### Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

## SECTION 7: HANDLING AND STORAGE

### Precautions for Safe Handling

**Additional Hazards When Processed:** When heated, material emits irritating fumes.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

Avoid contact with lime (as CaO or Ca(OH)<sub>2</sub>) and water to prevent possible formation of corrosive caustic potash (KOH). Under most conditions the product is stable, but in contact with strongly acidic or basic materials and water, a reaction can occur producing heat. In hot, humid weather, feed mixes containing K MINUS and substantial quantities of acidic materials or strongly basic materials (for example: magnesium oxide or mono calcium phosphate) have the potential to react and give off heat. Adequate separation of these components during the mixing process should prevent this problem from developing. Add K MINUS to the mixer last - after the other ingredients have been mixed. The feed mix temperature should be checked at appropriate time intervals.

### Conditions for Safe Storage, Including Any Incompatibilities

**Storage Conditions:** Store in a dry, cool and well-ventilated place. Keep container tightly closed. Store away from incompatible materials.

**Incompatible Materials:** Acids. Water. Strong bases. Lime. Powdered metals.

**Specific End Use(s)** Feed Ingredient.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government

<b>Particulates not otherwise classified (PNOC)</b>		
<b>USA ACGIH</b>	ACGIH TWA (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup> Respirable fraction 10 mg/m <sup>3</sup> Total Dust
<b>USA OSHA</b>	OSHA PEL (TWA) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> Respirable fraction 15 mg/m <sup>3</sup> Total Dust

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Alberta	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (total)
British Columbia	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (total dust)
Manitoba	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (inhalable particles, recommended)
New Brunswick	OEL TWA (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup> (particulate matter containing no Asbestos and <1% Crystalline silica, respirable fraction)
Newfoundland & Labrador	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (inhalable particles, recommended)
Nova Scotia	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (inhalable particles, recommended)
Nunavut	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (respirable mass)
Northwest Territories	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (respirable mass)
Ontario	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (inhalable)
Prince Edward Island	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (inhalable particles, recommended)
Québec	VEMP (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (including dust, inert or nuisance particulates; containing no Asbestos and <1% Crystalline silica-total dust)
Saskatchewan	OEL STEL (mg/m <sup>3</sup> )	20 mg/m <sup>3</sup> (insoluble or poorly soluble-inhalable fraction) 6 mg/m <sup>3</sup> (insoluble or poorly soluble-respirable fraction)
Saskatchewan	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (insoluble or poorly soluble-inhalable fraction) 3 mg/m <sup>3</sup> (insoluble or poorly soluble-respirable fraction)

### Exposure Controls

**Appropriate Engineering Controls:** For occupational/workplace settings: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Avoid creating or spreading dust.

**Personal Protective Equipment:** For occupational or bulk quantities: Gloves. Protective goggles. Protective clothing. Dust formation: dust mask.



**Materials for Protective Clothing:** For occupational or bulk quantities: Chemically resistant materials and fabrics.

**Hand Protection:** For occupational or bulk quantities: Wear chemically resistant protective gloves.

**Eye Protection:** For occupational or bulk quantities: Chemical safety goggles.

**Skin and Body Protection:** Wash contaminated clothing before reuse.

**Respiratory Protection:** Use NIOSH-approved dust mask if dust has the potential to become airborne. Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

**Other Information:** When using, do not eat, drink or smoke.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### Information on Basic Physical and Chemical Properties

Physical State	: Solid
Appearance	: White, granular powder
Odor	: None
Odor Threshold	: Not available
pH	: 11.6 (1% Solution, 0.02 moles/liter has pH 11.0)
Evaporation Rate	: Not available
Melting Point	: 891 °C (1635.80 °F)
Freezing Point	: Not available
Boiling Point	: Not available
Flash Point	: Not available
Auto-ignition Temperature	: Not available
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not available
Lower Flammable Limit	: Not available
Upper Flammable Limit	: Not available
Vapor Pressure	: Not available
Relative Vapor Density at 20 °C	: Not available

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<b>Relative Density</b>	: 2.426 @ 20 C (water = 1)
<b>Specific Gravity</b>	: Not available
<b>Solubility</b>	: Complete in water
<b>Partition Coefficient: N-octanol/water</b>	: Not available
<b>Viscosity</b>	: Not available
<b>Explosion Data – Sensitivity to Mechanical Impact</b>	: Not expected to present an explosion hazard due to mechanical impact.
<b>Explosion Data – Sensitivity to Static Discharge</b>	: Not expected to present an explosion hazard due to static discharge.

### SECTION 10: STABILITY AND REACTIVITY

**Reactivity:** Hazardous reactions will not occur under normal conditions. Reacts violently with acids and chlorine trifluoride. Contact with lime (as CaO or Ca(OH)<sub>2</sub>) and moisture (water or perspiration) can result in the formation of corrosive caustic potash (KOH).

**Chemical Stability:** Material is hygroscopic. Decomposes slowly on exposure to water (moisture).

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

**Conditions to Avoid:** Keep away from moisture, water, ignition sources, direct sunlight, extremely high or low temperatures, incompatible materials.

**Incompatible Materials:** Acids. Strong bases. Lime. Moisture.

**Hazardous Decomposition Products:** Carbon dioxide. Potassium oxides.

### SECTION 11: TOXICOLOGICAL INFORMATION

#### Information on Toxicological Effects - Product

**Acute Toxicity:** Harmful if swallowed.

**LD50 and LC50 Data:**

K-Minus™ Dense Granular Potassium Carbonate (584-08-7)	
<b>ATE US (oral)</b>	500.00 mg/kg body weight

**Skin Corrosion/Irritation:** Causes skin irritation. **pH:** 11.6 (1% Solution, 0.02 moles/liter has pH 11.0)

**Serious Eye Damage/Irritation:** Causes serious eye damage. **pH:** 11.6 (1% Solution, 0.02 moles/liter has pH 11.0)

**Respiratory or Skin Sensitization:** Not classified

**Germ Cell Mutagenicity:** Not classified

**Teratogenicity:** Not classified

**Carcinogenicity:** Not classified

**Specific Target Organ Toxicity (Repeated Exposure):** Not classified

**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** May cause respiratory irritation.

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** May cause respiratory irritation. May cause pulmonary edema.

**Symptoms/Injuries After Skin Contact:** Causes skin irritation.

**Symptoms/Injuries After Eye Contact:** Corrosive. Causes burns.

**Symptoms/Injuries After Ingestion:** Harmful if swallowed. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

**Chronic Symptoms:** None expected under normal conditions of use.

#### Information on Toxicological Effects - Ingredient(s)

**LD50 and LC50 Data:**

Potassium carbonate (584-08-7)	
<b>LD50 Oral Rat</b>	> 1870 mg/kg
<b>LD50 Dermal Rabbit</b>	> 2000 mg/kg

### SECTION 12: ECOLOGICAL INFORMATION

**Toxicity** Not classified

**Persistence and Degradability** Not established

**Bioaccumulative Potential** Not established

**Mobility in Soil** Not available

#### Other Adverse Effects

**Other Information:** Avoid release to the environment.

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### SECTION 13: DISPOSAL CONSIDERATIONS

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

**Ecology – Waste Materials:** Avoid release to the environment.

### SECTION 14: TRANSPORT INFORMATION

**In Accordance with DOT** Not regulated for transport

**In Accordance with IMDG** Not regulated for transport

**In Accordance with IATA** Not regulated for transport

**In Accordance with TDG** Not regulated for transport

### SECTION 15: REGULATORY INFORMATION


#### US Federal Regulations

<b>K-Minus™ Dense Granular Potassium Carbonate (584-08-7)</b>	
<b>SARA Section 311/312 Hazard Classes</b>	Immediate (acute) health hazard
<b>Potassium carbonate (584-08-7)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

#### US State Regulations

Neither this product nor its chemical components appear on any US state lists.

#### Canadian Regulations

<b>K-Minus™ Dense Granular Potassium Carbonate (584-08-7)</b>	
WHMIS Classification	Class E - Corrosive Material Class D Division 2 Subdivision B - Toxic material causing other toxic effects
	
<b>Potassium carbonate (584-08-7)</b>	
Listed on the Canadian DSL (Domestic Substances List)	
Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects Class E - Corrosive Material

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

### SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Revision Date** : 07/14/2015

**Other Information** : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

#### GHS Full Text Phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H302	Harmful if swallowed
H315	Causes skin irritation
H318	Causes serious eye damage
H335	May cause respiratory irritation

#### Party Responsible for the Preparation of This Document

Church & Dwight  
500 Charles Ewing Blvd

# K-Minus<sup>TM</sup> Dense Granular Potassium Carbonate

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Ewing Township, NJ 08628  
T 1-800-526-3563

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