



# SAFETY DATA SHEET

According to 29 CFR 1910.1200

## NITRASOL POTASSIUM

Date of issue: July 01, 2012 Revision date: May 21, 2021 Version: 4

### SECTION 1.- IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product identifier

Product form	Mixture
Substance name	Nitrogen Potassium Compound Fertilizer
CAS No.	Not available
Formula	$\text{KNO}_3 + \text{Mg}(\text{NO}_3)_2$
Synonyms	Nitrate potassium-magnesium; potassium nitrate + magnesium nitrate; potassium nitrate (powder) with 1% magnesium.

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture	Fertilizers
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#### 1.3 Details of the supplier of the safety data sheet

Pima Chemicals & Fertilizers, LLC  
1370 Nogales, Az.  
Tel. 011 52 (662) 182-0559  
rgutierrez@quimicapima.com  
www.quimicapima.com

Química Pima, S.A. de C.V.  
Del Cobre 20, Parque Industrial Hermosillo.  
Hermosillo, Sonora, México. C.P. 83297  
Tel. 011 (662) 251-0010 ventas@quimicapima.com

#### 1.4 Emergency telephone number

Emergency number	CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300
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### SECTION 2.- HAZARD IDENTIFICATION

#### 2.1. GHS-US classification

Oxidizing solids 3 H272  
Causes mild skin irritation 3 H316  
Eye damage/irritation 2B H320  
Specific target organ toxicity (single exposure) 3 H335

#### 2.2. Label elements

##### GHS-US labelling

Hazard pictograms (GHS-US)



Signal word (GHS-US):

Warning

Hazard statement (GHS-US):

H272 May intensify fire; oxidizer.  
H315 Causes skin irritation.  
H320 Causes eye irritation.  
H335 May cause respiratory irritation.



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### Precautionary statements (GHS-US):

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
 P220 Keep/Store away from clothing, combustible materials.  
 P221 Take any precaution to avoid mixing with combustibles.  
 P261 Avoid breathing dust.  
 P264 Wash exposed skin thoroughly after handling.  
 P271 Use only outdoors or in a well-ventilated area.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P312 Call a POISON CENTER/doctor/physician if you feel unwell.  
 P332+P313 If skin irritation occurs: Get medical advice/attention.  
 P337+P313 If eye irritation persists: Get medical advice/attention.  
 P362+P364 Take off contaminated clothing and wash it before reuse.  
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.  
 None to our knowledge.

### 2.3. Other hazards

### 2.4 Unknown acute toxicity (GHS-US)

Not applicable.

## SECTION 3.- COMPOSICION / INFORMATION OF INGREDIENTS

### 3.1 Substance

Not applicable

### 3.2 Mixture

Name	Product identifier	%	GHS-US classification
Potassium Nitrate	(CAS No.) 7757-79-1	< 90.00	Ox. Sol. 3; H272 Skin Irrit. 3, H316 Eye Irrit. 2B, H320 STOT-SE 3; H335
Magnesium Nitrate	(CAS No.) 10377-60-3	> 1.0	Eye irritation 2A, H319

## SECTION 4.- FIRST AID MEASURE

### 4.1. Description of first air measure

<b>First-aid measures general</b>	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice.
<b>First-aid measures after eye contact</b>	Flush with water for at least 15 minutes, raising and lowering eyelids occasionally. Get medical attention if irritation persists.
<b>First-aid measures after skin contact</b>	Thoroughly wash exposed area for at least 15 minutes. Remove contaminated clothing. Launder contaminated clothing before reuse. Get medical attention if irritation persists.
<b>First-aid measures after inhalation</b>	Remove to fresh air. Give oxygen if breathing is difficult; give artificial respiration if breathing has stopped. Get medical attention.
<b>First-aid measures after ingestion</b>	If Potassium Nitrate is swallowed, if conscious, give plenty of water. Immediately call a physician. Never give anything by mouth to an unconscious person.



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## 4.2. Most important symptoms and effects, both acute and delayed

<b>Symptoms/injuries after inhalation</b>	Irritation of the respiratory tract. Pain / dry throat. Cough.
<b>Symptoms/injuries after skin contact</b>	Irritation of the skin. Redness. Pain.
<b>Symptoms/injuries after eye contact</b>	Redness of the eye tissue. Irritation of the eye tissue. Pain. Tearing,
<b>Symptoms/injuries after ingestion</b>	Abdominal pain, diarrhea, nausea, vomiting. After absorption of large quantities: blood in the stool. Methemoglobinemia. They may appear last time: change blue / gray skin color. Dizziness. Feeling weak. Heart rhythm disturbances. Headache. Disorders of consciousness.
<b>Chronic symptoms</b>	ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Skin rash/inflammation. Respiratory difficulties.

## 4.3. Indications of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5.- FIREFIGHTING MEASURES

### 5.1. Extinguishing media

<b>Suitable extinguishing media</b>	Adapt extinguishing media to the environment.
<b>Unsuitable extinguishing media</b>	No unsuitable extinguishing media known.

### 5.2. Special hazard arising from the substance or mixture

<b>Fire hazard</b>	DIRECT FIRE HAZARD. Non combustible. INDIRECT FIRE HAZARD. Promotes combustion. Reactions involving a fire hazard: see "Reactivity Hazard".
<b>Explosion hazard</b>	DIRECT EXPLOSION HAZARD. No data available on direct explosion hazard. INDIRECT EXPLOSION HAZARD. No data available on indirect explosion hazard.
<b>Reactivity</b>	Decomposes on exposure to temperature rise: release of oxygen. On burning: release of toxic and corrosive gases/vapours (nitrous vapours). Violent to explosive reaction with many compounds e.g.: with organic material, with combustible materials, with (some) metals and their compounds and with (strong) reducers. Reacts with (some) acids: release of toxic and corrosive gases/vapours (nitrous vapours).

### 5.3. Advice for firefighters

<b>Precautionary measures fire</b>	Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: have neighborhood close doors and windows.
<b>Firefighting instructions</b>	Cool tanks/drums with water spray/remove them into safety. Do not move the load if exposed to heat. Dilute toxic gases with water spray.
<b>Protection during firefighting</b>	Heat/fire exposure: compressed air/oxygen apparatus.

## SECTION 6.- ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

<b>Protective equipment</b>	Gloves. Protective clothing. Dust cloud production: compressed air/oxygen apparatus. Reactivity hazard: compressed air/oxygen apparatus. Reactivity hazard: gas-tight suit.
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Emergency procedures	Mark the danger area. Prevent dust cloud formation, e.g. by wetting. No naked flames. Wash contaminated clothes. In case of hazardous reactions: keep upwind. In case of reactivity hazard: consider evacuation.
Measures in case of dust release	In case of dust production: keep upwind. Dust production: have neighborhood close doors and windows.
<b>6.1.2. For emergency responders</b>	
Protective equipment	Do not attempt to take action without suitable protective equipment. For further information refer to section 8 Exposure controls/personal protection"
Emergency procedures	Ventilate area.

### 6.2. Environmental precautions

Avoid release to the environment. Do not allow product to spread into the environment. Do not discharge into drains or rivers

### 6.3. Methods and material for containment and cleaning up.

<b>Method for containment</b>	Contain released substance, pump into suitable containers. Consult "Material-handling" to select material of containers. Plug the leak, cut off the supply. Knock down/dilute dust cloud with water spray. If reacting: dilute toxic gas/vapor with water spray. Take account of toxic/corrosive precipitation water.
<b>Methods for cleaning up</b>	Prevent dispersion by covering with dry sand/earth. Scoop solid spill into closing containers. See "Material-handling" for suitable container materials. Spill must not return in its original container. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.
<b>Other information</b>	Dispose of materials or solid residues at an authorized site.

### 6.4 Reference to other sections

For further information refer to section 8: Exposure-controls/personal protection.

## SECTION 7.- HANDLING AND STORAGE

### 7.1. Precautions for safe handling

<b>Precautions for safe handling</b>	Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Keep the substance free from contamination. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Avoid raising dust. Keep away from naked flames/heat. Observe normal hygiene standards. Keep container tightly closed. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.
<b>Hygiene measures</b>	Do not drink, eat or smoke in the workplace. Always wash hands after handling the product. Do not eat, drink or smoke when using this product.

### 7.2. Conditions for safe storage, including any incompatibilities

<b>Storage conditions</b>	Keep only in the original container in a cool, well ventilated place away from incompatible materials. Keep container closed when not in use.
<b>Incompatible products</b>	KEEP SUBSTANCE AWAY FROM: combustible materials. Reducing agents. (Strong) acids. metals. Organic materials.
<b>Heat-ignition</b>	KEEP SUBSTANCE AWAY FROM: heat sources.
<b>Storage area</b>	Store in a dry area. Store at room temperature. Keep container in a well-ventilated place. Meet the legal requirements.
<b>Special rules on packaging</b>	SPECIAL REQUIREMENTS: closing. Dry. Correctly labelled. Meet the legal requirements. Secure fragile packaging in solid containers.
<b>Packaging materials</b>	SUITABLE MATERIAL: Synthetic material. Glass. MATERIAL TO AVOID: Aluminum.



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7.3 Specific end use(s) No additional information available.

**SECTION 8.- EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1. Control parameters**

Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Potassium Nitrate 7757-79-1	Not available	Not available	Not available
Magnesium Nitrate 10377-60-3	Not available	Not available	Not available

**8.2. Exposure controls**

<b>Appropriate engineering controls</b>	Ensure good ventilation of the work station. Extraction to remove dust at its source. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
<b>Personal protective equipment</b>	Dust production: dust mask with filter type P2. Gloves. Safety glasses.
<b>Material for protective clothing</b>	GIVE GOOD RESISTANCE: butyl rubber. Neoprene. Rubber. GIVE POOR RESISTANCE: natural fibers.
<b>Hand protection</b>	Gloves.
<b>Eye protection</b>	Safety glasses. In case of dust production: protective goggles.
<b>Skin and body protection</b>	Protective clothing.
<b>Respiratory protection</b>	Dust production: dust mask with filter type P2.
<b>Environmental exposure controls</b>	Avoid release to the environment.

**SECTION 9.- PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 Information on basic physical and chemical properties**

<b>Physical state:</b>	Solid.	<b>Appearance:</b>	Crystalline solid. Crystalline powder.
<b>Odor:</b>	Odorless.	<b>Color:</b>	Colorless to white.
<b>Molecular mass</b>			No data available.
<b>Odor threshold</b>			No data available.
<b>pH</b>			6 - 8
<b>pH solution</b>			5%
<b>Relative evaporation rate (butyl acetate=1)</b>			No data available.
<b>Melting point</b>			334°C
<b>Freezing point</b>			No data available.
<b>Boiling point</b>			Not applicable.
<b>Flash point</b>			Not applicable.
<b>Self ignition temperature</b>			Not applicable.
<b>Decomposition temperature</b>			400°C
<b>Flammability (solid, gas)</b>			No data available.
<b>Vapor pressure</b>			No data available.



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Relative vapor density at 20°C	3
Relative density	2.1
Density/specific gravity	2100 kg/m <sup>3</sup>
Solubility	Soluble in water. Soluble un glycerol. Water: 32 g/100 ml. Ethanol: 0.16 g/100 ml.
Log Pow	Not applicable (inorganic substance).
Log Kow	No data available.
Viscosity, kinematic	No data available.
Viscosity, dynamic	No data available.
Explosive properties	No data available.
Oxidizing properties	May intensify fire; oxidizer.
Explosive limits	No data available.

### 9.2 Other information

No additional information available.

### SECTION 10.- STABILITY AND REACTIVITY

#### 10.1 Reactivity

Decomposes on exposure to temperature rise: release of oxygen. On burning: release of toxic and corrosive gases/vapours (nitrous vapours). Violent to explosive reaction with many compounds e.g.: with organic material, with combustible materials, with (some) metals and their compounds and with (strong) reducers. Reacts with (some) acids: release of toxic and corrosive gases/vapours (nitrous vapours).

#### 10.2 Chemical stability

Stable under recommended storage conditions.

#### 10.3 Possibility of hazardous reactions

None under normal conditions of use.

#### 10.4 Conditions to avoid

Direct sunlight. Heat. Incompatible materials. Open flame. Sparks.

#### 10.5 Incompatible materials

Combustible materials. Strong reducing agents.

#### 10.6 Hazardous decomposition products

Nitrogen oxides. Oxygen.

### SECTION 11.- TOXICOLOGICAL INFORMATION

#### 11. 1. Information on toxicological effects

Likely routes of exposure

Skin and eyes contact; inhalation; ingestion.

Acute toxicity

Not classified.

Name	LD <sub>50</sub> oral	LD <sub>50</sub> dermal	LC <sub>50</sub> inhalation
Potassium Nitrate	3750 mg/kg (rat)	-	-
Magnesium Nitrate	5400 mg/kg (rat)	-	-

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitization

Not classified.



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Germ cell mutagenicity	Not classified.
Carcinogenicity	Not classified.
Reproductive toxicity	Not classified.
Specific target toxicity (single exposure)	May cause respiratory irritation.
Specific target toxicity (repeat exposure)	Not classified.
Aspiration hazard	Not classified.

**SECTION 12. ECOLOGICAL INFORMATION**

**12.1 Toxicity**

Ecology - General	Classification concerning the environment: not applicable.
Ecology - Air	Not classified as dangerous for the ozone layer.
Ecology - Water	Mild water pollutant (surface water). Ground water pollutant. Maximum concentration in drinking water: 50 mg/l (nitrate). Not harmful to fishes (LC <sub>50</sub> (96h) >1000 mg/l). Slightly harmful to invertebrates (Daphnia) (EC <sub>50</sub> (48h): 100 - 1000 mg/l). May cause eutrophication. Slightly harmful to plankton (EC <sub>50</sub> : 100 - 1000 mg/l). Insufficient data available on ecotoxicity.

LC <sub>50</sub> fishes 1	162 mg/l (96 h; Pisces; Lethal)
LC <sub>50</sub> other aquatic organisms 1	39 mg/l (96 h; <i>Daphnia magna</i> )
EC <sub>50</sub> other aquatic organisms 1	200 - 1000 mg/l (Plankton; Nocivity test)
LC <sub>50</sub> fish 2	1378 mg/l ( <i>Poecilia reticulata</i> )
LC <sub>50</sub> other aquatic organisms 2	490 mg/l (48 h; <i>Daphnia magna</i> )
TLM fish 1	3000 mg/l (96 h; <i>Lepomis macrochirus</i> )
TLM fish 2	162 mg/l (96 h; <i>Gambusia affinis</i> )
Threshold limit other aquatic organisms 1	39 mg/l (96 h; <i>Daphnia magna</i> )
Threshold limit other aquatic organisms 2	490 mg/l (48 h; <i>Daphnia magna</i> )

**12.2 Persistence and degradability**

No additional information available.

**12.3 Bioaccumulative potential**

No additional information available.

**12.4 Mobility in soil**

No additional information available.

**12.5 Other adverse effects**

**Other information** No known ecological damage caused by this product.

**SECTION 13.- DISPOSAL CONSIDERATIONS**

**13.1. Waste treatment methods**

Waste treatment methods	Dispose of in accordance with relevant local regulations.
Waste disposal recommendations	Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be



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mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Precipitate/make insoluble. Remove to an authorized dump (Class I). Do not discharge into surface water.  
Can be considered as non hazardous waste.

Additional information

### SECTION 14.- TRANSPORT INFORMATION

<b>14.1. UN number</b>	1486
<b>14.2. UN proper shipping name</b>	Potassium Nitrate, yellow label, with the number 5.1 and the legend "oxidizer".
<b>14.3. Additional information</b>	
Other information	No supplementary information available.
Overland transport	No additional information available.
Transport by sea	No additional information available.
Air transport	No additional information available.



### SECTION 15.- REGULATORY INFORMATION

#### 15.1 US Federal regulations

<b>Potassium Nitrate (7757-79-1)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 313 - Emission Reporting	1 % Nitrate compounds (water dissociable)

#### 15.2 International regulations

##### CANADA

<b>Potassium Nitrate (7757-79-1)</b>	
Listed on the Canadian DSL (Domestic Substances List) inventory.	
WHMIS Classification	Class C - Oxidizing Material Class D Division 2 Subdivision B - Toxic material causing other toxic effects

##### EU-Regulations

<b>Potassium Nitrate (7757-79-1)</b>
No additional information available.

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Ox. Sol. 3 H272

##### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

O; R8

#### 15.2.2. National regulations

<b>Potassium sulfate (7778-80-5)</b>
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Not listed on the Canadian Ingredient Disclosure List.

**15.3 US State regulations**

No additional information available.

**SECTION 16.- OTHER INFORMATION**

<b>NFPA</b>	NFPA health hazard	1	NFPA fire hazard	0	NFPA instability hazard	0	NFPA Special hazard	-
<b>HMIS III</b>	Health	1	Flammability	0	Physical	1	Personal Protection	F

**F** Safety glasses, gloves, protective apron and dust respirator.



**Other information:** None.

**Made for:** Quimica Pima, S.A. de C.V. Del Cobre No. 20 Parque Industrial. Hermosillo, Sonora, México. 83297.

**Date of issue:** July 01, 2012

**Revision date:** May 21, 2021

**Revision note:** In this latest revision is updated according to 29 CFR 1910.1200.  
May 21,2021 Section 14 of transport is modified to be consistent with the substance.

*IMPORTANT NOTE: Information in this SDS is from available published sources and is believed to be accurate, but is not exhaustive and will be used only as a guide, which is based on current knowledge of the chemical substance or mixture and apply to the appropriate product for safety precautions. No warranty, express or implied, is made and Pima Chemicals & Fertilizers, LLC and Quimica Pima, S.A. de C.V. assumes no liability resulting from the use of this SDS. The user must determine suitability of this information for his application.*

End of Safety Data Sheet