

# MATERIAL SAFETY DATA SHEET

Potassium Nitrate

## SECTION 1 . Product and Company Identification

Product Name and Synonym: Potassium Nitrate

Product Code: 253-53

Material Uses:  
Manufacturer: OFI Testing Equipment, Inc.  
11302 Steeplecrest Drive  
Houston, TX 77065 USA  
Phone: (713) 880-9885  
Fax: (713) 880-9886

Entry Date : 5/11/2010

Print Date: 9/13/2010

24 Hour Emergency Assistance : Chemtrec 800-424-9300  
Canutec 613-996-6666

Health:	1			
Flammability:	0			
Reactivity:	3			
Hazard Rating:				
Least	Slight	Moderate	High	Extreme
0	1	2	3	4
NA = Not Applicable		NE = Not Established		

## SECTION 2 HAZARD IDENTIFICATION

Heat, shock, friction, or contact with other materials may cause fire or explosion. Harmful if swallowed. Avoid breathing vapor or dust. Use adequate ventilation. Avoid contact with eyes, skin or clothes. Wash thoroughly after handling. Keep closed.

Emergency Overview: Danger! Strong Oxidizer. Contact With Other Material May Cause Fire. Harmful If Swallowed, Inhaled Or Absorbed Through Skin. Causes Irritation To Skin, Eyes And Respiratory Tract. Inhalation: Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath. Ingestion: Causes irritation to the gastrointestinal tract. Symptoms may include nausea, vomiting and diarrhea. May cause gastroenteritis and abdominal pains. Purging and diuresis can be expected. Rare cases of nitrates being converted to the more toxic nitrites have been reported, mostly with infants. Skin: Causes irritation to skin. Symptoms include redness, itching, and pain. Eye Contact: Causes irritation, redness, and pain. Chronic Exposure: Under some circumstances methemoglobinemia occurs in individuals when the nitrate is converted by bacteria in the stomach to nitrite. Nausea, vomiting, dizziness, rapid heart beat, irregular breathing, convulsions, coma, and death can occur should this conversion take place. Chronic exposure to nitrites may cause anemia and adverse effects to kidney. Aggravated by Exposure: No Information Found.

## SECTION 3 MIXTURE COMPONENTS

SARA 313	Component	CAS Number	Percent Comp.	Dimension	Exposure Limits
<input type="checkbox"/>	Potassium Nitrate	CAS# 7757-79-1	100%	W/W	TXDS: orl-rat LD <sub>50</sub> : 3750 mg/Kg

## SECTION 4 FIRST AID MEASURES

Heat, shock, friction, or contact with other materials may cause fire or explosion. Harmful if swallowed. Avoid breathing vapor or dust. Use adequate ventilation. Avoid contact with eyes, skin or clothes. Wash thoroughly after handling. Keep closed.

FIRST AID: SKIN: Wash exposed area with soap and water. If irritation persists,

## Potassium Nitrate

seek medical attention.

EYES: Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. Seek Medical Aid. INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen

INGESTION: If swallowed, induce vomiting immediately after giving two glasses of water. Never give anything by mouth to an unconscious person.

### SECTION 5 FIRE FIGHTING MEASURES

Fire Extinguisher Type: Water spray  
Fire / Explosion Hazards: contact with other material causes fire.  
Fire Fighting Procedure: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and clothing.

### SECTION 6 ACCIDENTAL RELEASE MEASURES

evacuate area. Wear self-contained breathing apparatus and protective clothing. Cover with dry lime or soda ash.  
Remove all sources of ignition. Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Clean up spills in a manner that does not disperse dust into the air. Use non-sparking tools and equipment. Reduce airborne dust and prevent scattering by moistening with water. Pick up spill for recovery or disposal and place in a closed container.

### SECTION 7 HANDLING AND STORAGE

Store in a cool, dry, well-ventilated place away from incompatible materials. Wash thoroughly after handling. avoid inhalation of dust.

### SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection: NIOSH/MSHA-approved respirator  
Ventilation  
Local Exhaust   
Mechanical   
Protective Gloves: chemical resistant gloves.  
Eye Protection: Splash Goggles  
Other Protective Equipment: Wear appropriate clothing to prevent skin exposure

### SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Melting Point:	752°C	Percent Volatile by Volume:	100%
Boiling Point:	decomp @400°C	Evaporation Rate	not applicable
Vapor Pressure:	not applicable	Evaporation Standard	
Vapor Density:	not applicable	Auto Ignition Temp	information not available
Solubility in Water:	soluble	Lower Flamm. Limit in Air	information not available

Potassium Nitrate

Appearance /Odors: white crystals Upper Flamm. Limit in Air information not available
Flash Point: information not available
Specific Gravity: 2.109

SECTION 10 STABILITY AND REACTIVITY INFORMATION

Stability: Stable
Conditions to Avoid: Avoid contact with heat, sparks, flames, or other sources of ignition.
Materials to Avoid: strong oxidizers, reducing agents, finely powered metals, acids.
Hazardous Decomposition Products: nitrogen oxides and toxic fumes.
Hazardous polymerization: Will Not Occur
Conditions to Avoid: None known

SECTION 11 Toxicological Information

Carcinogenic References: NTP Carcinogen - Known: No, IARC Category- None

SECTION 12 Ecological Information

Environmental Fate:No information found.
Environmental Toxicity:No information found.

SECTION 13 Disposal Considerations

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

SECTION 14 Transport Information

DOT Classification: Potassium Nitrate, 5.1, UN1486, PG III

DOT Regulations may change from time to time. Please consult the most recent D.O.T. regulations.

SECTION 15 Regulatory Information

Chemical Inventory Status -
Part 1:Ingredient
Potassium Nitrate (7757-79-1)
TSCA Yes
EC Yes
Japan YES
Australia Yes

Chemical Inventory Status -
Part 2:Ingredient
Potassium Nitrate (7757-79-1)
Korea Yes
DSL Yes
NDSL No
Phil. Yes

Federal, State & International Regulations -
Part 1: Ingredient.
Potassium Nitrate (7757-79-1)
RQ No
TPQ No
List NO

# Potassium Nitrate

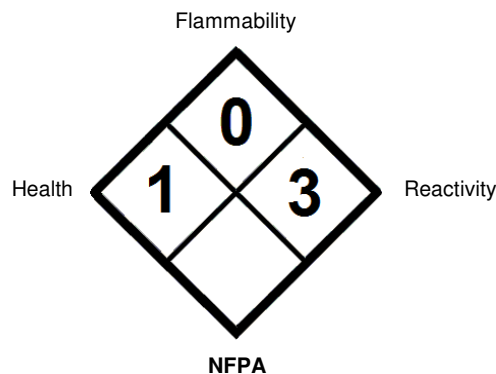
Chemical Catg No

Federal, State &  
International Regulations –  
Part 2:Ingredient  
Potassium Nitrate (7757-79-1)  
CERCLA NO  
261.33 No  
8(d) No

Chemical Weapons Convention: No  
TSCA 12 (b):No  
CDTA:No PURE/SOLID  
SARA 311/312: Acute:YES  
Chronic: YES  
Fire: YES  
Pressure: No  
Reactivity: No  
Australian Hazchem Code: 1T  
Poison Schedule:NONE ALLOCATED

## SECTION 16 Additional Information

**DANGER!!** This material emits TOXIC fumes at high temperatures. Effects of over exposure:irritation of the eyes,skin upper respiratory tract and mucous membranes. Methemoglobin formation which in sufficient amounts can cause cyanosis.,this onset can be delayed 2-4 hours. Acute:the acute systems will be more severe than the effects of over exposure.Chronic: continues to be more severe than the effects of over exposure and acute. Target organs: blood and central nervous system. Conditions aggravated/target organs. Persons with pre-existing eye, skin, or respiratory conditions may be more susceptible.



### Revisions

6/22/2010

0.1

updated msds to 16 section from 10 section  
msds. STN

The information herein is believed to be accurate and is offered in good faith for the user's consideration and investigation. No warranty either expressed or implied is made for the completeness or accuracy of the information whether originating from the above mentioned company or not. Users of this material should satisfy themselves by independent investigation of current scientific and medical knowledge that the material can be used safely.