

MATERIAL SAFETY DATA SHEET

➤ Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Potassium Nitrate Powder KN03
Synonyms: Saltpeter; niter; Nitric acid, potassium salt
Manufacturer: WENTONG POTASSIUM SALT GROUP CO., LTD.
22F WENTONG BUILDING, NO. 739 KUNMING ROAD, YANGPU SHANGHAI 200082, CHINA
TEL: 86-21-80179166
FAX: 86-21-80179292
WEB: www.wentong.cn
Date: Feb, 2014

➤ Section 2 - COMPOSITION, INFORMATION ON INGREDIENTS

| CAS# | Chemical Name | content | EINECS# |
|-----------|--------------------------|---------|-----------|
| 7757-79-1 | Potassium nitrate Powder | 100 | 231-818-8 |

Text for R-phrases: see Section 16

Hazard Symbols: 0

Risk Phrases: 8

➤ Section 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Contact with combustible material may cause fire. Hygroscopic (absorbs moisture from the air).

Potential Health Effects

Eye:

May cause eye irritation.

Skin:

Dust causes mechanical irritation. Low hazard for usual industrial handling.

Ingestion:

Causes gastrointestinal irritation with nausea, vomiting and diarrhea. May be harmful if swallowed.

Inhalation:

May cause respiratory tract irritation. May cause methemoglobinemia.

Chronic:

Prolonged exposure may cause anemia and methemoglobinemia, characterized by dizziness, drowsiness, headache, breath shortness, cyanosis (bluish skin due to deficient oxygenation of the blood), rapid heart rate and chocolate-brown colored blood. May cause kidney injury.

➤ Section 4 - FIRST AID MEASURES

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ADD: 22F WENTONG BUILDING, No. 739 Kunming Road, Yangpu, Shanghai, China

电话(TEL): +86-21-80179166

传真(FAX): +86-21-80179292

网址: <http://www.wentong.com>

电子邮件(e-mail): wentong@wentong.com

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid.

Skin:

In case of contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid if irritation develops and persists. Wash clothing before reuse.

Ingestion:

If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

✦ Section 5 - FIRE FIGHTING MEASURES

General Information:

Strong oxidizer. Contact with other material may cause fire. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Wear appropriate protective clothing to prevent contact with skin and eyes. Wear a self-contained breathing apparatus (SCBA) to prevent contact with thermal decomposition products. Some oxidizers may react explosively with hydrocarbons(fuel). May accelerate burning if involved in a fire.

Extinguishing Media:

Cool containers with flooding quantities of water until well after fire is out. For small fires, do NOT use dry chemicals, carbon dioxide, halon or foams. USE WATER ONLY. For large fires flood fire with water from a distance.

✦ Section 6 - ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions.

Remove all sources of ignition. Provide ventilation. Do not use combustible materials such as paper towels to clean up spill. Keep combustibles (wood, paper, oil, etc.,) away from spilled material.

✦ Section 7 - HANDLING and STORAGE

Handling:

Wash thoroughly after handling. Avoid prolonged or repeated contact with skin. Avoid contact with eyes.

Keep container tightly closed.

Avoid ingestion and inhalation. Use with adequate ventilation. Wash clothing before reuse. Keep from contact with clothing and other combustible materials.

Storage:

Do not store near combustible materials. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from reducing agents. Separate from organic materials. Avoid storage on wood floors.

🔗 Section 8 – EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits CAS# 7757-79-1: Russia: 5 mg/m³ TWA CAS# 14797-55-8: Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

🔗 Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid

Color: white

Odor: odorless

pH: 4.5-8.5 (5% soln)

Vapor Pressure: Not available.

Viscosity: Not available.

Boiling Point: 400 deg C (dec)

Freezing/Melting Point: 334 deg C

Autoignition Temperature: Not available.

Flash Point: Not applicable.

Explosion Limits, lower: Not available.

Explosion Limits, upper: Not available.

Decomposition Temperature: 400 deg C

Solubility in water: Soluble.

Specific Gravity/Density: 2.11

Molecular Formula: KNO₃

Molecular Weight: 101.10

✦ Section 10 - STABILITY AND REACTIVITY

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Dust generation, excess heat.

Incompatibilities with Other Materials:

Reacts violently with organic materials, combustible materials, and reducing agents. Specific incompatibles under various conditions include aluminum, titanium, antimony, germanium, zinc, zirconium, calcium disilicide, chromium nitride, metal sulfides, boron, carbon, sulfur, phosphorus, phosphides, sodium phosphinate, sodium thiosulfate, citric acid, tin chloride, sodium acetate, and thorium carbide.

Hazardous Decomposition Products:

Nitrogen oxides, oxygen.

Hazardous Polymerization: Will not occur.

✦ Section 11 - TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 7757-79-1: TT3700000 CAS# 14797-55-8 unlisted.

LD50/LC50:

CAS# 7757-79-1: Oral, rabbit: LD50 = 1901 mg/kg; Oral, rat: LD50 = 3750 mg/kg; Oral, rat: LD50 = 3540 mg/kg.

CAS# 14797-55-8.

Carcinogenicity:

Potassium nitrate Powder- Not listed by ACGIH, IARC, or NTP.

Nitrate - Not listed by ACGIH, IARC, or NTP.

Other:

See actual entry in RTECS for complete information.

✦ **Section 12 - ECOLOGICAL INFORMATION**

Other No information available.

✦ **Section 13 - DISPOSAL CONSIDERATIONS**

Products which are considered hazardous for supply are classified as Special Waste and the disposal of such chemicals is covered by regulations which may vary according to location. Contact a specialist disposal company or the local waste regulator for advice. Empty containers must be decontaminated before returning for recycling.

✦ **Section 14 - TRANSPORT INFORMATION**

IATA

Shipping Name: POTASSIUM NITRATE POWDER

Hazard Class: 5.1

UN Number: 1486

Packing Group: III

IMO

Shipping Name: POTASSIUM NITRATE POWDER

Hazard Class: 5.1

UN Number: 1486

Packing Group: III

RID/ADR

Shipping Name: POTASSIUM NITRATE POWDER

Hazard Class: 5.1

UN Number: 1486

Packing group: III

✦ **Section 15 - REGULATORY INFORMATION**

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: 0

Risk Phrases:

R 8 Contact with combustible material may cause
fire.

Safety Phrases:

S 17 Keep away from combustible material.

WGK (Water Danger/Protection)

CAS# 7757-79-1: 1

CAS# 14797-55-8: No information available.

Canada

CAS# 7757-79-1 is listed on Canada's DSL List.

CAS# 7757-79-1 is not listed on Canada's Ingredient Disclosure List.

CAS# 14797-55-8 is not listed on Canada's Ingredient Disclosure List.


US FEDERAL

TSCA

CAS# 7757-79-1 is listed on the TSCA inventory.

CAS# 14797-55-8 is not listed on the TSCA inventory.

It is for research and development use only.

 **Section 16 - OTHER INFORMATION**

NOTE:

NO WARRENT EITHER EXPRESS OR IMPLIED, OR MERCHANTABILITY OR FITNESS OR OF ANY OTHER NATURE WITH RESPECT
TO THE PRODUCT OR TO THE INFORMATION AND RECOMMENDATIONS HERIN IS MADE HEREUNDER

FOR WENTONG POTASSIUM SALT GROUP CO., LTD.

AUTHORISED SIGNATURE

文通钾盐集团有限公司
WENTONG POTASSIUM SALT GROUP CO.,LTD