



SAFETY DATA SHEET

ProChemOnline.com



SECTION 1 PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: **Potassium Nitrate**
PRODUCT NUMBER: 2927
CAS NUMBER: 7757-79-1
SYNONYMS: Nitric acid, potassium salt, saltpeter, nitrate of potash

MANUFACTURER:

Prochem, Inc.
826 Roosevelt Road
Rockford, IL 61109

PHONE: 815-398-1788
FAX: 815-398-1810
TOLL FREE: 800-795-8788

IN CASE OF TRANSPORTATION EMERGENCY CONTACT CHEM-TREC: 1-800-424-9300

SECTION 2 HAZARDS IDENTIFICATION

CLASSIFICATION OF SUBSTANCE OR MIXTURE

Pictogram



Signal Word

Warning

Hazard Statements

H272	May intensify fire; oxidizer.
H412	Harmful to aquatic life with long lasting effects.

Precautionary Phrases

P210	Keep away from heat/sparks/open flames/hot surfaces
P220	Keep/store away from clothing/combustible material
P221	Take any precaution to avoid mixing with combustibles.
P273	Avoid release into the environment
P280	Wear protective gloves/protective clothing/eye protection/face protection
P370+P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction

HMIS CLASSIFICATION:

Health: 1 Fire: 0 Reactivity Hazard: 2

NFPA RATING:

Health: 0 Flammability: 0 Reactivity Hazard: 1 Specific Hazard: OX

EYE CONTACT: May cause slight to mild irritation of the eyes.

SKIN CONTACT: May cause slight to mild irritation of the skin.

INHALATION: May be irritating to the nose, mucous membranes, and respiratory tract.

INGESTION: Ingestion may lead to dizziness, abdominal cramps, vomiting, bloody diarrhea, weakness, and convulsions.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Formula: KNO_3

Molecular Weight: 101.1

CHEMICAL NAME	CAS#	%
Potassium Nitrate	7757-79-1	100

SECTION 4 FIRST AID MEASURES

EYE EXPOSURE: Immediately flush the eye with copious amounts of water for at least 15 minutes. Assure flushing under eyelids. A victim may need assistance in keeping their eyelids open. Get immediate competent medical attention.

SKIN EXPOSURE: Wash affected area with water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.

INHALATION: Remove to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention if necessary.

INGESTION: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention if necessary.

SECTION 5 FIREFIGHTING MEASURES

FLASH POINT: Not available

AUTO IGNITION TEMPERATURE: Not available

EXPLOSION LIMITS: Not available

EXTINGUISHING MEDIUM: Use carbon dioxide, extinguishing powder, or water spray. Fight larger fires with water spray or alcohol resistant foam.

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.

HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS: Nitrogen oxides and potassium oxides.

This substance is an oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition. During heating or in case of fire poisonous gases are produced.

SECTION 6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Wear all appropriate equipment when using this material. Ensure adequate ventilation.

ENVIRONMENTAL PRECAUTIONS: Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP: Small spills can be mixed with vermiculite or sodium carbonate and swept up.

SECTION 7 HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Wear appropriate personal protective equipment. Avoid contact with skin and eyes. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of dusts and aerosols. Handle under dry protective gas.

CONDITIONS FOR SAFE STORAGE: Store in cool, dry, and well-ventilated area. Keep away from heat and direct sunlight. Store away from flammable substances, reducing agents, metal powders, water, and moisture.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

EXPOSURE CONTROLS: Contains no substances with occupational exposure limit values.

EYE PROTECTION: Wear chemical safety glasses or goggles and face shield

SKIN PROTECTION: Wear nitrile or rubber gloves, and a complete suit protecting against chemicals

VENTILATION: Provide local exhaust, preferably mechanical.

RESPIRATOR: Use an approved respirator

ADDITIONAL PROTECTION: Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

COLOR AND FORM: White solid
ODOR: None
MOLECULAR WEIGHT: 101.11
BOILING POINT: 400° C (dec.)
MELTING POINT: 334° C
SPECIFIC GRAVITY: 2.109 gm/ml
VAPOR DENSITY: No data available
SOLUBILITY: Soluble

SECTION 10 STABILITY AND REACTIVITY

STABILITY: Stable
HAZARDOUS POLYMERIZATION: Will not occur
CONDITIONS TO AVOID: Contact with strong reducing agents or organic matter. Some nitrates can explode if heated to high temperatures.
INCOMPATIBILITY: Flammable substances. Reducing agents, water/moisture, organic materials, and metal powders.
DECOMPOSITION PRODUCTS: Nitrogen oxides and potassium oxides.

SECTION 11 TOXICOLOGICAL DATA

ACUTE TOXICITY: LD50 Oral – rat – 3540mg/kg. LD50 Oral – rat – 3750mg/kg. L0Lo Intravenous – cat – 100mg/kg. L050 Oral – rabbit – 1901mg/kg. TOLo Oral – mouse -36gm/kg/900-1. TOLo Oral – rat – 22gm/kg. TOLo Oral – rat 598 mg/kg. TOLo Oral – rabbit - 6505 mg/kg. TOLo Oral – guinea pig – 15gm/kg. TOLo Oral – guinea pig – 1670gm/kg. Bacteria-Escherichia coli; gene conversion and mitotic recombination: 5 pph.
CARCINOGENIC EFFECTS: According to ACGIH, NTP, and OSHA, No components of this product present at levels greater than or equal to 0.1% is identified a carcinogen. According to IARC, this product is probably carcinogenic to humans.
MUTAGENIC EFFECTS: Possible mutagenic effects reported in RTECS.
TETRAOGENIC EFFECTS: Not available
REPRODUCTIVE EFFECTS: Rat – Oral – Effects: Behavioral and other measures of fertility. Rabbit – Oral – Effects: Abortion. Guinea pig – Oral – Effects: Stillbirth and other effects to embryo.
CHRONIC TOXICITY: Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer.
RTECS: TT3700000

To the best of our knowledge the toxicological effects of this compound have not been fully investigated.

SECTION 12 ECOLOGICAL DATA

AQUATIC VERTEBRATE: LC50 – Gambusia affinis (Mosquito fish) – 22.5mg/L – 96h. Static test LC50 – Poecilia reticulata (Guppy) – 1,378mg/L – 96h
AQUATIC INVERTEBRATE: EC50 Daphnia magna (Water flea) – 226 mg/L – 72h
TERRESTRIAL: Not available

SECTION 13 DISPOSAL CONSIDERATIONS

Dispose of in according to local, state, and federal regulations.

SECTION 14 TRANSPORTATION DATA

UN1486
Potassium Nitrate
CLASS 5.1
PG III

Marine Pollutant: No

SECTION 15 REGULATORY INFORMATION

TSCA: Listed in the TSCA inventory

DSCL (EEC): Listed on the DSCL inventory

SARA 302/304: Not Listed

SARA 311/312: Reactivity Hazard, Chronic Health Hazard

SARA (TITLE 313): Potassium nitrate

CALIFORNIA PROP. 65: Not Listed

WHMIS CANADA: Class C: Oxidizing Materials

MASSACHUSETTS RIGHT TO KNOW COMPONENTS: Potassium Nitrate

NEW JERSEY RIGHT TO KNOW COMPONENTS: Potassium Nitrate

PENNSYLVANIA RIGHT TO KNOW COMPONENTS: Potassium Nitrate

SECTION 16 OTHER INFORMATION

DISCLAIMER: The information herein is believed to be accurate and reliable as of the date compiled. However, Prochem, Inc. makes no representation, warranty, or guarantee of any kind with respect to the information in this document or any use of the product based on the information.

DATE PREPARED: 08/14