



VOLUNTARY PURCHASING GROUPS, INC.

Safety Data Sheet Hi-Yield® Nitrate of Soda

SECTION 1: Identification

Product identifier

Product name Hi-Yield® Nitrate of Soda

Supplier's details

Name Voluntary Purchasing Groups, Inc.
Address 230 FM 87
Bonham, TX 75418
USA

Telephone 855-270-4776

Emergency phone number(s)

In the event of a medical or chemical emergency contact ChemTel, Inc.
North American 1-800-255-3924 or worldwide Intl. + 01-813-248-0585

SECTION 2: Hazard identification

Classification of the substance or mixture

GHS label elements, including precautionary statements

Pictogram



Signal word

Warning

Hazard statement(s)

H270
H320

May cause or intensify fire; oxidizer
Causes eye irritation

Other hazards which do not result in classification

SECTION 3: Composition/information on ingredients

Substances

Hazardous components

Component	Concentration
Sodium nitrate (CAS no.: 7631-99-4)	

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice	Call a poison control center or doctor for treatment advice. Have the Safety Data Sheet, and if available, the product container or label with you when calling a poison control center or doctor, or going for treatment. Never give fluids or induce vomiting if a patient is unconscious or convulsing regardless of cause of injury. If breathing difficulties occur, seek medical attention immediately.
If inhaled	Move person to fresh air. If person is not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Call a poison control center or doctor for treatment advice.
In case of skin contact	Wash skin with soap and plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.
In case of eye contact	Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Call a poison control center or doctor for treatment advice.
If swallowed	Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a poison control center or doctor for treatment advice.

Personal protective equipment for first-aid responders

Respiratory Protection: NIOSH/MSHA approved for protection against toxic dusts containing quartz.
Ventilation: General or local exhaust to maintain employee exposure below the TLV/PEL.
Protective Gloves: PVC or Neoprene.
Eye Protection: Safety glasses or goggles (ANSI Z87.1 1979)
Other Protective Clothing or Equipment: Apron, boots, long sleeved shirt and full-length pants may be worn when necessary to prevent skin contact.
Eye wash and shower facilities should be available.

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Dry chemical, CO₂, water spray, or foam

Specific hazards arising from the chemical

Product is an oxidizer. Oxidizers decompose, especially when heated, to yield oxygen, which increases the burning rate of combustible matter. Contact with easily oxidizable, organic, or other combustible materials, which may result in ignition, violent combustion, or explosion.

Special protective actions for fire-fighters

Remove containers from fire, if possible without risk. Cool containers exposed to flames with water. Utilized self-contained breathing apparatus with full-face piece operated in pressure demand or other positive pressure mode.

Yields toxic gases when heated.

Further information

Primary Routes of Exposure and Target Organs: Inhalation, skin and eye contact, ingestion.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Sweep-up or shovel material into a clean, labeled container and seal. Comply with all applicable governmental regulations concerning spill reporting, handling and disposal of waste.

Dispose of in accordance with Federal, State, and local regulations.

SECTION 7: Handling and storage

Precautions for safe handling

Store away from reducing agents and liquids of low flashpoints. Store in a cool, dry, well-ventilated area away from ignition sources. Empty containers used to hold this product should be removed from the premises.

Conditions for safe storage, including any incompatibilities

May ignite other combustible materials (wood, paper, oil, etc.). Reaction with fuels may be violent. Run-off of sewer may create fire or explosion hazard.

SECTION 8: Exposure controls/personal protection

Appropriate engineering controls

Ventilation: General or local exhaust to maintain employee exposure below the TLV/PEL.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Causes serious eye irritation. Splash-proof or dust-resistant safety goggles to prevent eye contact with this substance. Contact lenses should not be worn.

Skin protection

May cause redness or irritation. PVC or Neoprene gloves

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Body protection

Apron, boots, long sleeved shirt and full-length pants may be worn when necessary to prevent skin contact. Eye wash and shower facilities should be available.

Respiratory protection

NIOSH/MSHA approved respiratory devices to protect against dusts

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form	White Prills (pellets)
Odor	
Odor threshold	
pH	8-10 {5% aqueous solution}
Melting point/freezing point	307°C/584°F at 1013 hPa
Initial boiling point and boiling range	380 degrees C
Flash point	Does not apply
Evaporation rate	Not established
Flammability (solid, gas)	Not flammable
Upper/lower flammability limits	
Upper/lower explosive limits	
Vapor pressure	Does not apply
Vapor density	Not established
Relative density	
Solubility(ies)	Appreciable
Partition coefficient: n-octanol/water	Will not evolve flammable or toxic gases
Auto-ignition temperature	
Decomposition temperature	> 550°C/1022°F
Viscosity	
Explosive properties	Not explosive
Oxidizing properties	Oxidizer

Other safety information

Specific Gravity (H₂O=1): 2.26

SECTION 10: Stability and reactivity

Reactivity

No hazardous reaction when handled and stored according to provisions.

Chemical stability

Stable under normal storage and temperature conditions.

Possibility of hazardous reactions

Hazardous Polymerization: Will not occur

Conditions to avoid

Keep away from flammable, combustible and reducing substances.

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Incompatible materials

Reducing agents, flammable or combustible materials and other agents. Do not mix or contaminate with other agents.

Hazardous decomposition products

Thermal decomposition may yield oxides of nitrogen and sodium oxide. Nitrous oxides {NO_x}, sodium nitrite and sodium oxide.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

1. Acute Overexposure: Exposure may result in irritation of the skin and/or mucous membranes. Ingestion of large amounts causes violent gastroenteritis. Symptoms of exposure include dizziness, abdominal cramps, vomiting, headache, mental impairment, cyanosis.
2. Chronic Overexposure: Prolonged or repeated exposure may cause anemia, methemoglobinemia, weakness, general depression, headache, mental impairment, and nephritis. A constant oral intake of nitrate containing foods or water could lead to formation of carcinogen N-Nitroso compounds.

Skin corrosion/irritation

May cause redness or irritation

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitization

Irritation to respiratory tract

Delayed lung effects after short term exposure to thermal degradation products

Carcinogenicity

None

STOT-repeated exposure

Medical Conditions Generally Aggravated by Exposure: Disorders of the respiratory system and skin.

Additional information

NTP: No IARC: No OSHA: No

Other Exposure Limits:

TLV (nuisance dusts)=10 mg/m³; PEL (nuisance dusts)=15 mg/m³

SECTION 12: Ecological information

Persistence and degradability

In aqueous compartments, the substance will dissociate into sodium and nitrate ions. Other minor compounds are also expected to be dissociated in their corresponding ions. Sodium ions are not subject to further degradation. Under anoxic conditions, nitrate is subjected to denitrification and is ultimately converted into molecular nitrogen as part of the nitrogen cycle. Nitrate and other oxyanions impurities are likely to be found in oxic compartments.

Bioaccumulative potential

Sodium nitrate has a low potential for bioaccumulation based on physicochemical properties (high water solubility).

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Mobility in soil

Nitrate has a low potential for adsorption. Portion not taken up by plants, can leach to groundwater. Sodium can participate in ion exchange processes.

Other adverse effects

Excess nitrate leaching may enrich waters leading to eutrophication.

SECTION 13: Disposal considerations

Disposal of the product

If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws.

SECTION 14: Transport information

DOT (US)

Proper Shipping Name: Potassium Nitrate

Class: 5.1

ID#: UN 1498

Packing Group: III

Limited Quantity: Yes

IMDG

Proper Shipping Name: Potassium Nitrate

Class: 5.1

ID#: UN 1498

Packing Group: III

Limited Quantity: Yes

IATA

Proper Shipping Name: Potassium Nitrate

Class: 5.1

ID#: UN 1498

Packing Group: III

Limited Quantity: Yes

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

Pennsylvania Right To Know Components

Chemical name: Nitric acid, sodium salt

CAS number: 7631-99-4

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HMIS Rating

Hi-Yield® Nitrate of Soda	
HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	

NFPA Rating



SECTION 16: Other information

Voluntary Purchasing Groups, Inc. urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.