



VOLUNTARY PURCHASING GROUPS, INC.

Safety Data Sheet Hi-Yield® Calcium Nitrate

SECTION 1: Identification

Product identifier

Product name Hi-Yield® Calcium Nitrate

Product number 32118

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

- Acute toxicity, oral (chapter 3.1), Cat. 4
- Eye damage/irritation (chapter 3.3), Cat. 1

GHS label elements, including precautionary statements

Pictogram



Hazard statement(s)

H302 Harmful if swallowed
H318 Causes serious eye damage

Other hazards which do not result in classification

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SECTION 3: Composition/information on ingredients

Substances

Hazardous components

Component	Concentration
Nitric acid, ammonium calcium salt (1:?:?) (CAS no.: 15245-12-2)	80 - 90 %
Calcium nitrate tetrahydrate (CAS no.: 10124-37-5)	10 - 15 %

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.
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.

Most important symptoms/effects, acute and delayed

Causes serious eye damage. May give off gas, vapor or dust that is very irritation or corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. Harmful if swallowed. May cause burns to mouth, throat and stomach.

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Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician: No specific antidote, contact Poisons Information Center. All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Water spray (fog), foam or dry chemical

Specific hazards arising from the chemical

Non-combustible.

Hazardous thermal decomposition products: Nitrogen oxides, metal oxide/oxides.

Special protective actions for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Move containers from fire area if possible to do so without risk.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective clothing. Safety glasses. Full suit. Dust respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Ventilate area of spill. Avoid dust formation. Avoid breathing dust.

Environmental precautions

Avoid contact of spilt material and runoff with soil and surface waterways.

Methods and materials for containment and cleaning up

Use a tool to scoop up solid material and place into an appropriate labeled waste container.

Do not mix with sawdust or other combustible material. Avoid creating dusty conditions and prevent wind dispersal.

Keep out of waterways.

Reference to other sections

See Sections 1 for emergency contact information

See Section 8 for information on an appropriate personal protective equipment

See Section 13 for additional waste treatment information

SECTION 7: Handling and storage

Precautions for safe handling

Avoid creating dusty conditions and prevent wind dispersal. Avoid all possible sources of ignition (spark or flame).

Avoid contamination by any source including metals, dust and organic materials. Avoid contact with skin and eyes.

Wash thoroughly after handling.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also section 8 for additional information measures.

Conditions for safe storage, including any incompatibilities

Store and use away from heat, sparks, open flame or any other ignition source. Avoid contact with combustible materials and reducing agents. Keep away from acids or bases. Prevent moisture pickup in handling and storage.

SECTION 8: Exposure controls/personal protection

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Appropriate engineering controls

Use process enclosures, local exhaust ventilation, or others engineering controls to keep airborne levels below recommend exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. Keep away from foodstuffs and beverages. Do not eat, drink or smoke during work time.

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

Eye/face protection

Wear protective safety glasses

Skin protection

Wear protective disposable vinyl gloves to prevent skin exposure

Body protection

Wear appropriate long-sleeved clothing to minimize skin contact. Remove soiled or soaked clothing immediately. Clean skin thoroughly after work; apply skin cream.

Respiratory protection

Disposable particulate mask. Be sure to use an approved/certified or equivalent equipment. Wear appropriate respirator when ventilation is inadequate.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form	White solid granule
Odor	None
Melting point/freezing point	>400°C*
Initial boiling point and boiling range	no melting up to 300°C*
Flammability (solid, gas)	Not flammable
Relative density	2.05
Solubility(ies)	100 g/l at 20°C
Auto-ignition temperature	Will not auto-ignite between room temperature and melting temperature
Explosive properties	None
Oxidizing properties	None

SECTION 10: Stability and reactivity

Chemical stability

Stable under normal handling and storage conditions described in Section 7.

Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid

Extreme humidity, excess heat.

Incompatible materials

Combustible materials, acids, alkalis, reducing materials, organic materials.

Hazardous decomposition products

In the event of fire: see section 5.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Nitric acid, ammonium LD50, Dermal Rat >2000 mg/kg calcium salt LD50, Oral Rat (female) > 300 and < 2000 mg/kg

Skin corrosion/irritation

Adverse symptoms may include the following: pain or irritation, redness, blistering may occur.

Serious eye damage/irritation

Adverse symptoms may include the following: pain, watering, redness

Germ cell mutagenicity

Not mutagenic

Carcinogenicity

No carcinogenicity study needs to be proposed as nitric acid, ammonium calcium salt is not genotoxic.

Reproductive toxicity

No data available.

Additional information

Nitric acid, calcium and ammonium double salt, hydrated form:

Absorption: Rapidly absorbed

Distribution: Enters the systemic circulation without passing through liver tissues

Metabolism: Rapidly metabolized. Metabolised to the following: Ca²⁺, NH₄⁺, NO₃⁻

Elimination: The chemical and its metabolites are fully excreted and do not accumulate within the body.

SECTION 12: Ecological information

Persistence and degradability

Not applicable, since inorganic substance.

Mobility in soil

Soil/water partition coefficient (K_{oc}) : <1

This product may move with surface or groundwater flows because its water solubility is: > 100 g/L

Other adverse effects

Substances which have an unfavorable influence on the oxygen balance and can be measured using parameters such as BOD, COD, etc.: Absent

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)

Not regulated

IMDG

Not regulated

IATA

Not regulated

SECTION 15: Regulatory information

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

New Jersey Right To Know Components

Common name: CALCIUM NITRATE

CAS number: 10124-37-5

SECTION 16: Other information

Further information/disclaimer

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.