

MATERIAL SAFETY DATA SHEET



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

Voluntary Purchasing Groups, Inc.
230 FM 87
Bonham, Texas 75418

Hi-Yield® Calcium Nitrate

Effective Date: February 5, 2014

1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT: Hi-Yield® Calcium Nitrate
EPA No.: N/A

HMIS:

Health: 0
Fire: 0
Reactivity: 0

COMPANY IDENTIFICATION:

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

2. INGREDIENTS:

CAS No.	Chemical Name	% Range
15245-12-2	Hydrated Ammonium Calcium Nitrate Double Salt	

3. HAZARDOUS IDENTIFICATION:

Hazard Category: CAUTION! MAY BE HARMFUL IF SWALLOWED. MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION. Do not ingest. Wash thoroughly after handling.

Potential acute health effects

Eyes: Slightly irritating to the eyes.

Skin: Slightly irritating to the skin.

Ingestion: Harmful if swallowed.

Inhalation: Slightly irritating to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Potential chronic health effects

Carcinogenic effects: No known significant effects or critical hazards.

Mutagenic effects: No known significant effects or critical hazards.

Chronic effects: No known significant effects or critical hazards.

Teratogenicity: No known significant effects or critical hazards.

Developmental effects: No known significant effects or critical hazards.

Fertility effects: No known significant effects or critical hazards.

Over-exposure signs/symptoms

Inhalation: Adverse symptoms may include the following: respiratory tract irritation, coughing.

Ingestion: No specific data.

Skin: Adverse symptoms may include the following: irritation, redness.

4. FIRST AID MEASURES:

Route(s) of Entry: Contact, inhalation, ingestion.

Eyes: Immediately flush eyes with water for at least 15 minutes, while holding eyelids open. Seek medical attention at once.

Skin: For skin contact, wash immediately with soap and water. If irritation persists get medical attention.

Inhalation: Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

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Ingestion: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Notes to physician: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

5. FIRE FIGHTING MEASURES:

Flash Point: Not flammable **Method Used:** Not applicable

Upper Flammable Limit (UFL): Not applicable

Lower Flammable Limit (LFL): Not applicable

Auto Ignition: Not flammable

Flammability Classification: Non-flammable

Rate of Burning: Not applicable

General Fire Hazards: This product is an aqueous solution which will not burn. However, if evaporated to dryness this product is an oxidizer and can sustain combustion.

Hazardous Combustion Products: These products are: nitrogen oxides (NO, NO₂ etc.)

Extinguishing Media: Use water only in flooding quantities to fight the fire. DO NOT use chemical extinguisher or foam or attempt to smother the fire with steam or sand.

Fire Fighting Equipment/Instructions: Firefighters should wear full protective clothing including self contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES:

Containment Procedures: Stop the flow of material, if this is without risk. Wear appropriate protective equipment and clothing during cleanup. Contain the discharged material and dike the spilled material where possible. Prevent entry into sewers, drains, underground or confined spaces, water intakes and waterways.

Clean-Up Procedures: Absorb spill with inert material such as: lime, polypads, or other suitable absorbent material. Shovel the absorbed material into appropriate container for disposal.

Evacuation Procedures: Isolate area. Keep unnecessary personnel away.

Special Procedures: Isolate exposure. Wear appropriate personal protective equipment. Follow all Local, State, Federal and Provincial regulations for disposal.

7. HANDLING AND STORAGE:

Handling Procedures: 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.

Storage Procedures: Store and use away from heat, sparks, open flame or any other ignition source. Avoid contact with combustible materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

Engineering measures: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure eyewash facilities are located close to the working environment.

Personal protection

Eyes: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. Recommended: safety glasses with side-shields.

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Skin: Personal protective equipment for the body should be selected based on the task being performed and the risks involved.

Respiratory: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hands: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. >8 hours (breakthrough time): butyl rubber, natural rubber (latex), nitrile rubber.

Personal protection in case of a large spill: Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be adequate. Consult a specialist before handling this product.

9. PHYSICAL AND CHEMICAL PROPERTIES:

Physical state: Solid. [Hygroscopic]

Color: White. Off-white.

Odor: Odorless.

Melting/freezing point: 116,67°C (242°F)

Specific gravity: 1,12

Bulk Density (lbs/cu.ft): 70.0 (Vibrated)/77.3 (Loose)

Solubility: Soluble in the following materials: cold water.

Solubility (at 20°C/68°F): 316g/l (2.64 lb/gal)

10. STABILITY & REACTIVITY:

Stability and reactivity: Stable under recommended storage and handling conditions.

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

Incompatibility with various substances: Reactive or incompatible with the following materials: combustible materials, acids and alkalis.

Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Hazardous thermal decomposition products: These products are: nitrogen oxides (NO, NO2 etc.)

Hazardous polymerization: Under normal conditions of storage and use, hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION:

Potential acute health effects

Inhalation : Slightly irritating to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Ingestion: Harmful if swallowed.

Skin contact: Slightly irritating to the skin.

Eye contact: Slightly irritating to the eyes.

Product/ingredient name	Result	Species	Dose	Exposure
Preparation	LD50 Oral	Rat	>2100 mg/kg	-

12. ECOLOGICAL INFORMATION:

Environmental effects: No known significant effects or critical hazards.

Aquatic ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
Preparation	-	Acute LC50 >100mg/L	Fish	96 hours

Conclusion/Summary: The product is not expected to harm the environment when used properly according to directions.

Biodegradability

Conclusion/Summary: The product does not show any bioaccumulation phenomena.

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13. DISPOSAL CONSIDERATIONS:

Waste disposal: The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any byproducts should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Consult your local or regional authorities.

14. TRANSPORTATION INFORMATION

US DOT Information: Not a DOT regulated material. 49 CFR 172.102 Special Provision 34 specifically removes the commercial grade calcium nitrate double salt (calcium nitrate and ammonium nitrate) from the Hazardous Materials Table 49 CFR 172.101.

15. REGULATORY INFORMATION:

HCS Classification: Not regulated.

U.S. Federal regulations: United States inventory (TSCA 8b): Not determined.

SARA 302/304/311/312 extremely hazardous substances: No products were found.

SARA 302/304 emergency planning and notification: No products were found.

SARA 302/304/311/312 hazardous chemicals: No products were found.

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: No products were found.

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: No products were found.

Clean Air Act (CAA) 112 accidental release prevention: No products were found.

Clean Air Act (CAA) 112 regulated flammable substances: No products were found.

Clean Air Act Section: Not listed

112(b) Hazardous Air

Pollutants (HAPs)

Clean Air Act Section 602: Not listed

Class I Substances

Clean Air Act Section 602: Not listed

Class II Substances

DEA List I Chemicals: Not listed

(Precursor Chemicals)

DEA List II Chemicals: Not listed

(Essential Chemicals)

United States inventory: Not determined.

(TSCA 8b)

16. OTHER INFORMATION:

Notice to reader

To the best of our knowledge, the information provided in this Product Information Sheet is accurate as at the date of its issue. The information it contains is being given for safety guidance purposes and relates only to the specific material and uses described in it. This information does not necessarily apply to that material when combined with other material(s) or when used otherwise than as described herein. Final determination of the suitability of any material is the sole responsibility of the user. All materials may represent unknown hazards and should be used with caution. Yara International ASA disclaims any liability for loss or damage resulting from the use of any data, information or recommendations set out in this Product Information Sheet.