



VOLUNTARY PURCHASING GROUPS, INC.

Safety Data Sheet Hi-Yield Triple Super Phosphate

SECTION 1: Identification

Product identifier

Product name Hi-Yield Triple Super Phosphate

Other means of identification

Calcium phosphate, monobasic; GTSP; Granular TPS; Superphosphates, concentrated; Triple super phosphate (TSP)

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

- Eye damage/irritation (chapter 3.3), Cat. 1

GHS label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

H318 Causes serious eye damage

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Precautionary statement(s)

P280

P305+P351+P338

Wear protective gloves/protective clothing/eye protection/face protection.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

Other hazards which do not result in classification

SECTION 3: Composition/information on ingredients

Substances

Hazardous components

1. Calcium Phosphate, Monobasic, Monohydrate

Concentration 65 % (Weight)

CAS no. 7758-23-8

2. Calcium sulfate

Concentration 3 % (Weight)

CAS no. 7778-18-9

3. Calcium phosphate, dibasic

Concentration 2 % (Weight)

CAS no. 7757-93-9

SECTION 4: First-aid measures

Description of necessary first-aid measures

If inhaled

If product dust causes respiratory irritation or distress, move the exposed person to fresh air immediately. If breathing is difficult or irregular, administer oxygen; if respiratory arrest occurs, start artificial respiration by trained personnel. Loosen tight fitting clothing such as a collar, tie, belt or waistband. Seek medical attention if cough or other symptoms appear or persist.

In case of skin contact

Flush skin with large amounts of water while removing contaminated clothing and continue rinsing for at least 15 minutes. Wash contaminated clothing and shoes thoroughly before reuse. If irritation occurs or persists, seek medical attention.

In case of eye contact

Do not rub eyes. Immediately flush eyes with large amounts of water for 15 minutes, occasionally lifting the upper and lower lids. Remove contact lenses, if present and easy to do, after the first 2 minutes and continue rinsing. Seek immediate medical attention, preferably from an ophthalmologist.

Most important symptoms/effects, acute and delayed

Potential health symptoms and effects

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Eyes: Causes severe eye irritation and eye damage. Symptoms include redness, swelling, pain, tearing and blurred vision. May cause burns and permanent eye damage. May cause mechanical irritation of the eye and surrounding tissue.

Skin: May cause skin irritation with localized redness, itching and discomfort.

Inhalation: Inhalation of dust may cause irritation of the nose, throat, mucous membranes and respiratory tract.

Ingestion: May cause irritation of the gastrointestinal tract with headache, nausea, vomiting abdominal pain and diarrhea.

Chronic: Persons with pre-existing skin disorders or impaired respiratory function may be more susceptible to the effects of this substance.

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

Advice to Doctor and Hospital Personnel

Persons with impaired kidney function may be more susceptible to the effects of this substance. Treat symptomatically and supportively.

Phosphates are slowly and incompletely absorbed when ingested and seldom result in system effects. Such effects, however, have occurred. Symptoms may include vomiting, lethargy, diarrhea, blood chemistry effects, cardiac effects and central nervous system effects. The toxicity of phosphates is due to their ability to sequester calcium.

Ingestion of large quantities of phosphate salts (>1.0 g for an adult) may cause an osmotic catharsis resulting in diarrhea and probable abdominal cramps. Larger doses such as 4 - 8 g will almost certainly cause these effects in everyone. In healthy individuals most of the ingested salt will be excreted in the feces with the diarrhea and, therefore, causing no systemic toxicity. Doses greater than 10 g hypothetically may cause systemic toxicity. Treatment should take into consideration both anionic and cationic portions of the molecule.

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Suitable methods of extinction: Use extinguishing media appropriate for surrounding fire.

Unsuitable methods of extinction: None known

Specific hazards arising from the chemical

Closed containers may explode due to the buildup of pressure when exposed to extreme heat. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent or may be delayed. Obtain medical attention.

Explosion hazards: Material does not present an explosion hazard.

Special protective actions for fire-fighters

Full protective equipment including self-contained breathing apparatus should be used. Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion when exposed to extreme heat. Water contaminated by this material must be contained from being discharged to any waterway, sewer or drain to prevent environmental contamination.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid dust generation or accumulation. Do not inhale dust. Ventilate the area. Evacuate non-essential personnel. Wear appropriate protective clothing designated in Section 8. Remove all sources of ignition.

Environmental precautions

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Avoid dispersal of spilled material or runoff and prevent contact with soil and entry into drains, sewers or waterways.

Methods and materials for containment and cleaning up

Cover drains and contain spill. Minimize dust generation during clean-up. Carefully sweep, vacuum or shovel up material and place into an approved container for proper disposal. Observe possible restrictions (Sections 7.2 and 10.5). Wash contaminated area with soap and water. Do not allow material or runoff from rinsing contaminated areas to enter floor drains or storm drains and ditches which lead to waterways. Dispose of waste via a licensed waste disposal contractor.

Releases should be reported, if required, to appropriate agencies. Notify Local Emergency Planning Committee and State Emergency Response Commission for release greater than or equal to RQ (U.S. Section 304).

Reference to other sections

See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

Precautions for safe handling

Wear all appropriate personal protective equipment specified in Section 8. Minimize dust generation. Do not get in eyes or on skin or clothing. Do not breathe dust. If normal use of material presents a respiratory hazard, use only adequate ventilation or wear an appropriate respirator.

Advice on protection against fire and explosion Not considered to be a fire or explosion hazard

Conditions for safe storage, including any incompatibilities

Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10.5), food and drink. Transfer only to approved containers having correct labeling. Keep container tightly closed to prevent moisture absorption. Protect container against physical damage. Containers that have been opened must be carefully resealed and kept upright to prevent spillage. Containers of this material may be hazardous when empty as they contain product residues. Use appropriate containment to avoid environmental contamination. Ventilate closed areas. Do not take internally. Keep out of reach of children.

SECTION 8: Exposure controls/personal protection

Control parameters

1. Calcium sulfate (CAS: 7778-18-9)

PEL (Inhalation): see PNOR (Cal/OSHA)

OSHA Annotated Table Z-1, www.osha.gov

2. Calcium sulfate, Total dust (CAS: 7778-18-9)

PEL (Inhalation): 15 mg/m³ (OSHA)

OSHA Annotated Table Z-1, www.osha.gov

3. Calcium sulfate, Total dust (CAS: 7778-18-9)

PEL (Inhalation): 10 mg/m³ (Cal/OSHA)

OSHA Annotated Table Z-1, www.osha.gov

4. Calcium sulfate, Total dust (CAS: 7778-18-9)

REL (Inhalation): 10 mg/m³ (NIOSH)

OSHA Annotated Table Z-1, www.osha.gov

5. Calcium sulfate, Respirable fraction (CAS: 7778-18-9)

PEL (Inhalation): 5 mg/m³ (OSHA)

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OSHA Annotated Table Z-1, www.osha.gov

6. Calcium sulfate, Respirable fraction (CAS: 7778-18-9)

PEL (Inhalation): 5 mg/m³ (Cal/OSHA)

OSHA Annotated Table Z-1, www.osha.gov

7. Calcium sulfate, Respirable fraction (CAS: 7778-18-9)

REL (Inhalation): 5 mg/m³ (NIOSH)

OSHA Annotated Table Z-1, www.osha.gov

Appropriate engineering controls

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. Use adequate ventilation. Local exhaust is preferable. Refer to Section 7.1 for additional data.

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

Eye/face protection

Wear protective goggles or safety glasses with non-perforated side shields. Refer to 29 CFR 1910.133, ANSI Z87.4 or Standard EN 166.

Respiratory protection

None required with normal use. If dust generation is problematic, wear an approved filter type dust respirator when handling this product. Where risk assessment shows air-purifying respirators are appropriate use a full-faced respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Follow OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form	Grey to light brown crystalline powder
Odor	Acidic
Odor threshold	No data available.
pH	3.6 (1% aqueous solution @ 20 °C)
Melting point/freezing point	No data available.
Initial boiling point and boiling range	Decomposes
Flash point	No data available.
Evaporation rate	No data available.
Flammability (solid, gas)	Non-flammable
Upper/lower flammability limits	No data available.
Upper/lower explosive limits	No data available.
Vapor pressure	6.3 e-9 mm Hg @ 20 °C
Vapor density	No data available.
Relative density	No data available.
Solubility(ies)	No data available.
Partition coefficient: n-octanol/water	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	>200 °C (>392 °F)
Viscosity	No data available.
Explosive properties	No data available.

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Oxidizing properties

No data available.

Other safety information

No data available.

SECTION 10: Stability and reactivity

Reactivity

Reacts with alkali lyes. Mixing with urea forms urea phosphate, which is very sticky.

Chemical stability

This product is stable under recommended storage conditions, handling and use. Substance is hygroscopic (absorbs moisture from the air).

Possibility of hazardous reactions

None known. Hazardous polymerization does not occur.

Conditions to avoid

High temperatures; incompatible materials; moisture and exposure to air. Avoid dust generation.

Incompatible materials

Alkalis, urea

Hazardous decomposition products

Thermal decomposition products include phosphorus oxides, sulfur, toxic gases and fumes.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Acute Oral Toxicity

LD50, rat: >2,000 mg/kg

Acute inhalation toxicity

LC50, rat: >5.0 mg/l, 4 h

Acute dermal toxicity

LD50, rat: >2,000 mg/kg

Skin corrosion/irritation

May cause skin irritation.

Serious eye damage/irritation

Causes severe eye irritation and possible eye damage.

Respiratory or skin sensitization

No data available.

Germ cell mutagenicity

No data available.

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Carcinogenicity

No data available.

Reproductive toxicity

No data available.

Additional information

This material is not listed as a carcinogen by IARC, ACGIH, NTP or OSHA. No data is available regarding the mutagenicity or teratogenicity of this material, nor is there available data that indicates that it causes adverse developmental or fertility effects in humans.

SECTION 12: Ecological information

Toxicity

Slightly toxic to practically non-toxic to aquatic organisms. However, large discharges of this product into the environment may act as a plant nutrient and cause eutrophication.

Toxicity to aquatic plants: EC50 - Algae, static, 72 h: >87.6 mg/l

Persistence and degradability

Inorganic substances are not biodegradable. Methods for the determination of biodegradability are not applicable to inorganic substances.

Bioaccumulative potential

Not expected to bioaccumulate

Mobility in soil

Low potential for adsorption based on substance properties.

Results of PBT and vPvB assessment

This substance does not meet the criteria for PBT or vPvB according to regulation (EC) No. 1907/2006, Annex XIII.

Other adverse effects

Additional ecological information

Do not allow material to run into surface waters, wastewater or soil.

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13: Disposal considerations

Disposal of the product

The generation of waste should be avoided or minimized whenever 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 by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Waste treatment

The classification of this product may meet the criteria for a hazardous waste.

SECTION 14: Transport information

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DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

SECTION 15: Regulatory information

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

Massachusetts Right To Know Components

Chemical name: Pyrethrins

CAS number: 8003-34-7

New Jersey Right To Know Components

Common name: PYRETHRUM

CAS number: 8003-34-7

Pennsylvania Right To Know Components

Chemical name: Pyrethrins and pyrethroids

CAS number: 8003-34-7

Massachusetts Right To Know Components

Chemical name: 3-(2,2-Dichloroethenyl)-2,2-dimethylcyclopropane carboxylic acid, (3-phenoxy-phenyl)methyl ester

CAS number: 52645-53-1

New Jersey Right To Know Components

Common name: PERMETHRIN

CAS number: 52645-53-1

New Jersey Right To Know Components

Common name: CALCIUM SULFATE

CAS number: 7778-18-9

Pennsylvania Right To Know Components

Chemical name: Calcium sulfate

CAS number: 7778-18-9

OSHA Hazard Communication Standard

This material is not classified as highly hazardous in accordance with OSHA 29 CFR 1910.1200.

SARA 313 Components

None of the chemicals in this product are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to Know Act of 1986.

SARA 311/312 Hazards

None listed

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SARA 302/304 Components

None of the chemicals in this product are subject to reporting requirements of these sections of Title III of SARA.

California Prop. 65 Components

This product contains no chemical(s) known to the State of California to cause cancer, birth defects or other reproductive harm.

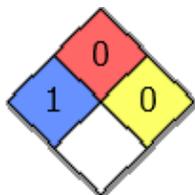
Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

HMIS Rating

Hi-Yield Triple Super Phosphate	
HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	C

NFPA Rating



SECTION 16: Other information

The information contained in this Safety Data Sheet is believed to be correct as of the date issued. Nothing herein contained shall be deemed to be a representation or warranty with respect to the product described herein. NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THIS INFORMATION, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE, AND ALL SUCH REPRESENTATIONS AND WARRANTIES ARE HEREBY EXPRESSLY DISCLAIMED BY TRAMMO. This information and product are furnished on the condition that the person receiving them shall make their own determination as to suitability of the product for their particular purpose and on the condition that they assume the risk of their use thereof. The conditions and use of this product are beyond the control of Trammo, and Trammo disclaims any liability for loss or damage incurred in connection with the use or misuse of this substance.