



Trammo

SAFETY DATA SHEET Granular Triple Superphosphate

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

Product Name: Granular Triple Superphosphate

Product Codes(s): GTSP

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

REACH Registration Number: No data available

1.2 Relevant identified uses of the substance or mixture and uses advised against

General Use: For use in agricultural, industrial and formulation applications

Uses advised against: No uses advised against

1.3 Details of the supplier and of the safety data sheet

Distributor

Trammo, Inc.

4211 W. Boy Scout Blvd., Suite 600

Tampa, FL 33607 USA

+1-813-261-0600

1.4 Emergency telephone number

Chemtrec: +1-800-424-9300

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of substance or mixture

Product definition: Substances

Classification in accordance with 28 CFR 1910 (OSHA HCS)

Eye Damage - Category 1 [H318]

2.2 Label Elements

Hazard Symbol(s):



GHS05

Signal Word:

Danger

Hazard Statement(s):

H318 - Causes serious eye damage

Precautionary Statements:

[Prevention]

P280 - Wear protective gloves, protective clothing and eye protection.

[Response]

P305 + P351 + P338 + P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Product description: Superphosphates, concentrated: CAS #65996-95-4, EINECS #266-030-3

Additional information: This product is a multi-constituent substance.

% by Weight	Ingredient	CAS Number	EC Number	Index Number	EC Classification
>/=65	Calcium Phosphate, Monobasic	7758-23-8	231-837-1	-----	Xi, R41
>/=3	Calcium Sulfate, Natural	7778-18-9	231-900-3	-----	-----
>/=2	Calcium Phosphate, Dibasic	7757-93-9	231-826-1	-----	-----

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to the health or the environment and hence require reporting in this section.

3.2 Mixtures

Chemical characterization

Not applicable

SECTION 4 - FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation: 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.

Eyes: 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.

Skin: 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.

Ingestion: Rinse mouth with water if victim is conscious. Remove dentures, if present. Give 2 - 3 glasses of water to drink if victim is conscious, alert and able to swallow. Do not induce vomiting unless directed to do so by medical personnel. Vomiting may occur spontaneously. If vomiting does occur and the victim is conscious, give water to further dilute the chemical. Never give anything by mouth to an unconscious or convulsing person. Obtain immediate medical assistance.

4.2 Most important symptoms and effects, both acute and delayed

Potential health symptoms and effects

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.

4.3 Indication of any immediate medical attention and special treatment needed

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

5.1 Extinguishable media

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

Unsuitable methods of extinction: None known

5.2 Special hazards arising from the substance or mixture

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.

5.3 Advice for firefighters

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

6.1 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.

6.2 Environmental precautions

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

6.3 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). If release occurs in the U.S. and is reportable under CERCLA Section 103, notify the National Response Center at (800) 424-8802 (USA) or (202) 426-2675 (USA).

6.4 Reference to other sections

See Section 13 for additional waste treatment information.

SECTION 7 - HANDLING AND STORAGE

7.1 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

7.2 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.

7.3 Specific end uses

Apart from the uses mentioned in Section 1.2, no other specific uses are stipulated.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Engineering measures: 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: Wear protective clothing to prevent repeated or prolonged contact with product. Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the representative supplier.

Hygiene measures: Facilities storing or using this material should be equipped with an eyewash station and safety shower. Change contaminated clothing. Preventive skin protection is recommended. Wash hands thoroughly after use, before eating, drinking or using the lavatory.

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.

Hand protection: Wear gloves recommended by glove supplier for protection against materials in Section 3. Gloves should be impermeable to chemicals and oil. Breakthrough time of gloves must be greater than the intended use period.

Other protective equipment: Protective clothing. Protective boots, if the situation requires.

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

9.1 Information on basic physical and chemical properties

Appearance	Grey to light brown crystalline powder
Odor	Acidic
Odor Threshold	No data available
Molecular Weight	Not applicable
Chemical Formula	Not applicable
pH	3.6 (1% aqueous solution @ 20 °C)
Freezing/Melting Point, Range	No data available
Initial Boiling Point	Decomposes
Evaporation Rate	Not applicable
Flammability (solid, gas)	Non-flammable
Flash Point	Not applicable
Autoignition Temperature	Not applicable
Decomposition Temperature	>200 °C (>392 °F)
Lower Explosive Limit (LEL)	Not applicable
Upper Explosive Limit (UEL)	Not applicable
Vapor Pressure	6.3 e-9 mm Hg @ 20 °C
Vapor Density	Not determined
Bulk Density	1.0 - 1.2 @ 20 °C
Viscosity	No data available
Solubility in Water	Partial
Partition Coefficient: n-octanol/water	No data available
Volatiles by Volume @ 21 °C	0%

9.2 Other data

No data available

SECTION 10 - STABILITY AND REACTIVITY

10.1 Reactivity

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

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

None known

Hazardous polymerization does not occur.

10.4 Conditions to avoid

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

10.5 Incompatible materials

Alkalis, urea

10.6 Hazardous decomposition products

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

SECTION 11 - TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

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 irritation/corrosion

May cause skin irritation.

Eye irritation/corrosion

Causes severe eye irritation and possible eye damage.

Sensitization

No data available

Genotoxicity in vitro/in vivo

No data available

Mutagenicity

No data available

Specific organ toxicity - single exposure

May cause irritation of the respiratory system

Specific organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

11.2 Further 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.

Handle in accordance with good industrial hygiene and safety practice.

SECTION 12 - ECOLOGICAL INFORMATION

12.1 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

12.2 Persistence and degradability

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

12.3 Bioaccumulation potential

Not expected to bioaccumulate

12.4 Mobility in soil

Low potential for adsorption based on substance properties.

12.5 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.

12.6 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

13.1 Waste treatment methods

Methods of disposal: 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 spill material and runoff and contact with soil, waterways, drains and sewers.

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

SECTION 14 - TRANSPORT INFORMATION

Note: Transportation information provided is for reference only. Customer is urged to consult 49 CFR 100 - 177, IMDG, IATA, EC, United Nations TDG and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

NOT REGULATED FOR TRANSPORT

SECTION 15 - REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for substance or mixture

U. S. Federal Regulations

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

OSHA Process Safety Management Standard: This product is not regulated under OSHA PSM Standard 29 CFR 1910.119.

EPA Risk Management Planning Standard: This product is not regulated under EPA RMP Standard (RMP) 40 CFR Part 68.

EPA Federal Insecticide, Fungicide and Rodenticide Act: This product is not a registered Pesticide under the FIFRA, 40 CFR Part 150.

TSCA Status: The substances in this product are listed on the Toxic Substance Control Act (TSCA) Inventory. This product is not subject to TSCA 12(b) Export Notification.

Superfund Amendments and Reauthorization Act (SARA)

SARA 313 Information: 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 Section 311/312 Hazard Categories: None listed

SARA 302/304 Extremely Hazardous Substance: None of the chemicals in this product are subject to reporting requirements of these sections of Title III of SARA.

SARA 302/304 Emergency Planning & Notification: None of the chemicals in this product are subject to reporting requirements of these sections of Title III of SARA.

Comprehensive Response Compensation and Liability Act (CERCLA): This product contains no CERCLA reportable substances.

Clean Air Act (CAA)

This product does not contain any chemicals that are listed as Hazardous Air Pollutants (HAPs) designated in CAA Section 112 (b).

This product does not contain any Class 1 Ozone depletors.

This product does not contain any Class 2 Ozone depletors.

Clean Water Act (CWA)

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

U.S. State Regulations

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986

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

Other U.S. State Inventories:

This material is not listed on any State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists.

Canada

WHMIS Hazard Symbol and Classification: None allocated

Canadian Controlled Products Regulations (CPR): This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations, and the SDS contains all the information required by the Controlled Products Regulations.

Canadian Ingredient Disclosure List (IDL): None of the chemicals in this product are listed on the IDL.

Canadian National Pollutant Release Inventory (NPRI): None of the chemicals in this product are listed on the NPRI.

European Economic Community

Labeling (67/548/EEC or 1999/45/EC): None allocated

WGK, Germany (Water danger/protection): 1

Global Chemical Inventory Lists

Country	Inventory Name	Inventory Listing*
Canada	Domestic Substance List (DSL)	Yes
Canada	Non-Domestic Substance List (NDSL)	No
Europe	Inventory of New and Existing Chemicals (EINECS)	Yes
United States	Toxic Substance Control Act (TSCA)	Yes
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
New Zealand	New Zealand Inventory of Chemicals (NZIoC)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No

*"Yes" indicates that all components of this product are in compliance with the inventory requirements administered by the governing country.

**"No" indicates that one or more components of this product are not on the inventory or are exempt from listing.

15.2 Chemical safety assessment

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

SECTION 16 - OTHER INFORMATION

Hazardous Material Information System (HMIS)

Health	1
Flammability	0
Physical Hazard	0
Personal Protection	C

HMIS & NFPA Hazard Rating Legend

* = Chronic Health Hazard	2 = MODERATE
0 = INSIGNIFICANT	3 = HIGH
1 = SLIGHT	4 = EXTREME



National Fire Protection Association (NFPA)

Flammability



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