

Magruder 251111

16-16-16

Results due December 15, 2025

Guaranteed Analysis:

Total Nitrogen (N).....16.0 %
6.26 % Ammoniacal Nitrogen
9.74 % Urea Nitrogen
Available Phosphate (P₂O₅).....16.0 %
Soluble Potassium (K₂O)16.0 %

Derived from: Urea, Ammonium Phosphate and Muriate of Potash

Also analyze for:

AS (ppm), Cd (ppm), Cr (ppm), Co (ppm), Pb (ppm), Hg (ppm),
Mo (ppm), Ni (ppm), Se (ppm), Cu (%), and Zinc (%)

The units above are those required for reporting data from this Magruder sample. They may not be the units required on a commercial fertilizer label.

Note: This Magruder Check Sample material is not to be used in the manufacture of products nor applied to any crops or for other fertilizer uses. It is intended for analytical testing purposes only.

SDS for this product can be found at:

<https://www.magruderchecksample.org/SDS/251111GuarSDS.pdf>

SDS for Magruder 251111

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Trade name : GroundWork 16-16-16 All-Purpose Fertilizer

1.2. Recommended use and restrictions on use

Recommended use : Fertilizer for lawns.
Restrictions on use : Keep out of reach of children. Avoid all contact with skin, eyes, or clothing. Avoid breathing dust.

1.3. Supplier

Gro Tec, Inc.
P. O. Box 290
Madison, GA 30650 - United States
Manufacturer Telephone (General) 1-706-342-1234 - 8:00am-5:00pm EST

1.4. Emergency telephone number

Emergency number : 1-800-424-9300 - CHEMTREC - Transportation and Non-Transportation related emergencies
1-703-527-3887 - CHEMTREC - Outside North America - Collect Calls Accepted

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Carcinogenicity Category 1A May cause cancer

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



GHS08

Signal word (GHS US) : Danger
Hazard statements (GHS US) : May cause cancer
Precautionary statements (GHS US) : Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves/protective clothing/eye protection/face protection.
If exposed or concerned: Get medical advice/attention.
Store locked up.
Dispose of contents/container to in accordance with local/regional/national/international regulations.

2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification : Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Limestone	(CAS-No.) 1317-65-3	15.14
Silica, crystalline - quartz	(CAS-No.) 14808-60-7	≥ 0.1
Non-hazardous and/or does not meet criteria for classification	(CAS-No.) N/A	Balance

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	: IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
First-aid measures after skin contact	: IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice and attention.
First-aid measures after ingestion	: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. Do NOT induce vomiting unless directed to do so by medical personnel.

4.2. Most important symptoms and effects (acute and delayed)

Chronic symptoms	: May cause cancer.
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4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Use extinguishing agent suitable for surrounding fire.
Unsuitable extinguishing media	: Avoid heavy hose streams.

5.2. Specific hazards arising from the chemical

Reactivity	: The product is non-reactive under normal conditions of use, storage and transport.
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5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures	: Only qualified personnel equipped with suitable protective equipment may intervene.
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6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: Exposure controls/personal protection.
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6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Sweep or scoop spills, dispose of any unusable material in approved landfill. Use appropriate PPE.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Ensure good ventilation of the work station. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Provide local exhaust or general room ventilation. Wear personal protective equipment.
Hygiene measures	: Separate working clothes from town clothes. Launder separately. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Store locked up. Store in a well-ventilated place. Keep cool. Avoid humid, wet or moist conditions. Keep container tightly closed.
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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Limestone (1317-65-3)		
OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (total dust) 5 mg/m ³ (respirable fraction)
NIOSH	NIOSH REL (TWA) (mg/m ³)	10 mg/m ³ (total dust) 5 mg/m ³ (respirable dust)

Silica, crystalline - quartz (14808-60-7)		
ACGIH	ACGIH TWA (mg/m ³)	0.025 mg/m ³ (respirable particulate matter)
OSHA	OSHA PEL (TWA) (mg/m ³)	50 µg/m ³
IDLH	US IDLH (mg/m ³)	50 mg/m ³ (respirable dust)
NIOSH	NIOSH REL (TWA) (mg/m ³)	0.05 mg/m ³ (respirable dust)

8.2. Appropriate engineering controls

Appropriate engineering controls : Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

If prolonged exposure is anticipated, it is recommended for handlers to wear appropriate clothing to prevent skin contact.

Respiratory protection:

In case of insufficient ventilation, use NIOSH approved respiratory protection.



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Variable colored granules
Color	: Variable
Odor	: No data available
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Non-flammable
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: Not applicable
Bulk density	: 45 – 80 lb/ft ³
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available
Explosion limits	: Not applicable
Explosive properties	: Not explosive
Oxidizing properties	: Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Hazardous polymerization will not occur.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

May be corrosive to mild steel and slightly corrosive to aluminum, zinc, or copper.

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Silica, crystalline - quartz (14808-60-7)	
Listed on IARC (International Agency for Research on Cancer), Listed as carcinogen on NTP (National Toxicology Program)	
IARC group	1 - Carcinogenic to humans
National Toxicity Program (NTP) Status	Known Human Carcinogens
In OSHA Hazard Communication Carcinogen list?	Yes

GHS-US Properties	Classification
Acute toxicity (oral)	Not classified
Acute toxicity (dermal)	Not classified
Acute toxicity (inhalation)	Not classified
Skin corrosion/irritation	Not classified
Serious eye damage/irritation	Not classified
Respiratory or skin sensitization	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	May cause cancer.
Reproductive toxicity	Not classified
Specific target organ toxicity (single exposure)	Not classified
Specific target organ toxicity (repeated exposure)	Not classified
Aspiration hazard	Not classified

Potential health effects

Inhalation

Acute : Exposure to dust may cause nasal and respiratory irritation. Acute Silicosis can occur with exposures to very high concentrations of respirable crystalline silica over a very short time period, sometimes as short as a few months. The symptoms of acute silicosis include progressive shortness of breath, fever, cough and weight loss.

Chronic : Excessive inhalation of crystalline silica (quartz) may cause lung injury.

Skin

Acute : May cause mild mechanical irritation.

Eye

Acute : May cause mild mechanical irritation.

Ingestion

Acute : Under normal conditions of use, no health effects are expected.

Mutagenicity : Not classified.

Carcinogenicity : Crystalline silica (quartz) inhaled from occupational sources is classified as carcinogenic to humans.

Reproductive Effects : Not classified.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

SECTION 14: Transport information

	UN number	Proper Shipping Name	Transport hazard class(es)	Packing group	Environmental hazards
DOT	Not regulated	Not regulated	Not regulated	Not regulated	Not applicable
IMDG	Not regulated	Not regulated	Not regulated	Not regulated	Not applicable
IATA	Not regulated	Not regulated	Not regulated	Not regulated	Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

Limestone (1317-65-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Silica, crystalline - quartz (14808-60-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. US State regulations

No additional information available

SECTION 16: Other information

Date of issue : 10 August 2020

SDS US (GHS HazCom 2012) - CGP

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