Magruder 231031 21-0-0

results due November 15, 2023

| Guaranteed Analysis | | |
|--------------------------------|----|---|
| Total Nitrogen (N) | 21 | % |
| 21% Ammoniacal Nitrogen | | |
| Total Sulfur (S) | 24 | % |
| 24% Sulfate Sulfur | | |
| Derived from: Ammonium Sulfate | | |

Also analyze for:

As (ppm), Cd (ppm), Cr (ppm), Co (ppm), Pb (ppm), Hg (ppm), Mo (ppm), Ni (ppm), Se (ppm), Cu (%) and Zn (%)

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: http://www.magruderchecksample.org/SDS/231031GuarSDSsds.pdf

SDS for Magruder 231031

SECTION 1: Identification

Product identifier

Product name Hi-Yield Ammonium Sulfate

Product number 32177; 32179
Brand Hi-Yield

Recommended use of the chemical and restrictions on use

Fertilizer

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 or 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

GHS classification in accordance with: OSHA (29 CFR 1910.1200)

GHS label elements, including precautionary statements

Hazard statement(s)

H402 Harmful to aquatic life

Precautionary statement(s)

P273 Avoid release to the environment.

P501 Dispose of contents/container to in accordance with Federal, State and local

regulations.

SECTION 3: Composition/information on ingredients

Mixtures

Hazardous components

| Component | Concentration |
|---|-----------------------------------|
| Ammonium Sulfate (CAS no.: 7783-20-2) | 90 - 100 % (weight), Proprietary_ |
| CLASSIFICATIONS: No data available HAZARDS: No data available | |

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice Remove contaminated clothing

If inhaled After inhalation of dust. Fresh air. if difficulties occur: Seek medical attention.

After inhalation of decomposition products: Keep patient calm, remove to

fresh air, seek medical attention.

In case of skin contact

Wash thoroughly with soap and water

In case of eye contact

Wash affected eyes for at least 15 minutes under running water with eyelids

held open. Seek medical attention.

If swallowed Rinse mouth immediately and then drink plenty fo water. Seek medical

attention.

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

Note to physician:

Treatment: After inhalation of decomposition products: Pulmonary odema prophytaxis.

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Carbon Dioxide, Water Spray

Specific hazards arising from the chemical

Ammonia can be emitted at 235 °C.

See section 7. Handling-storage for additional hazards.

Special protective actions for fire-fighters

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information

Product itself is non-combustible; fire extinguishing method of surrounding areas must be considered. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Impact Sensitivity: Based on the chemical structure there is no shock-sensitivity.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Do not get in eyes, on skin, or on clothing. Take appropriate protective measures.

Environmental precautions

Do not discharge into drains/surface waters/ground water. Retain and dispose of contaminated wash water.

Methods and materials for containment and cleaning up

For large amounts: Sweep/shovel up

For residues: Sweep/shovel up. Rinse away with water.

SECTION 7: Handling and storage

Precautions for safe handling

General Advice: Keep away from sources of ignition - No smoking. Handle in accordance with good industrial hygiene and safety practice.

Protection against fire and explosion: Avoid all sources of ignition: heat, sparks, open flame.

Conditions for safe storage, including any incompatibilities

General Advice: Protect against moisture. The substance/product may cake under the influence of moisture.

Storage incompatibility: General advice: Segregate from alkalies and alkalizing substances. Segregate from nitrites and alkaline substances.

SECTION 8: Exposure controls/personal protection

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

Eye/face protection

Tightly fitting safety goggles (chemical goggles).

Skin protection

Hand protection: Wear chemical resistant protective gloves. Consult with glove manufacturer for testing data.

Body protection

Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

General safety and hygiene measures: At the end of the shift the skin should be cleaned and skin-care agents applied.

Respiratory protection

Observe OSHA regulations for respirator use (29 CFR 1910.134). Wear a NIOSH-certified (or equivalent) respirator as necessary.

Thermal hazards

Thermal decomposition: >235 °C

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.) White crystalline solid

Odor Pungent

Odor threshold

pH 5.5

Melting point/freezing point

Initial boiling point and boiling range

Flash point Evaporation rate

Flammability (solid, gas)

Upper/lower flammability limits

Vapor pressure Vapor density Relative density

Solubility(ies)

Partition coefficient: n-octanol/water

Auto-ignition temperature Decomposition temperature

Viscosity

Explosive properties Oxidizing properties

Soluble in water

SECTION 10: Stability and reactivity

Reactivity

Reacts with alkalies and nitrites.

Chemical stability

Thermal decomposition: >235 °C To avoid thermal decomposition, do not overheat.

Possibility of hazardous reactions

Evolution of ammonia under influence of alkalies. Reacts with alkalies and nitrites.

Conditions to avoid

alkaline reactive substances, nitrites

Hazardous decomposition products

Ammonia

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Of low toxicity after single ingestion. Of low toxicity after short-term skin contact.

Skin corrosion/irritation

Not irritating to the skin.

Serious eye damage/irritation

Not irritating to the eyes

Respiratory or skin sensitization

Skin sensitizing effects were not observed in animal studies.

Carcinogenicity

In long-term animal studies in which the substance was given in high concentrations by feed, a carcinogenic effect was not observed.

Repeated dose toxicity: No substance-specific organ toxicity was observed after repeated administration to animals.

Reproductive toxicity

The results of animal studies gave no indication of a fertility impairing effect. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Teratogenicity: No indications of a developmental toxic/teratogenic effect were seen in animal studies. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. Genotoxicity: The substance was not mutagenic in bacteria. The substance was not mutagenic in studies with mammals.

STOT-repeated exposure

Signs and symptoms of overexposure: After inhalation of decomposition products: Risk of pulmonary edema. Symptoms can appear later.

SECTION 12: Ecological information

Toxicity

Aquatic toxicity: The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations. Acutely harmful for aquatic organisms.

Persistence and degradability

Inorganic product which cannot be eliminated from water by biological purification processes. Can be oxidized to nitrate, or be reduced to nitrogen, by microorganisms.

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 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

Pennsylvania Right To Know Components

Chemical name: Sulfuric acid diammonium salt

CAS number: 7783-20-2

NFPA Rating



SECTION 16: Other information

Further information/disclaimer

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