

Safety Data Sheet

Section 1 Product Information

Product Name: 20-0-4 STD, 75% Regain, 15% AM-SUL, MOP, 50LB.

Product Code: I0002959

Manufactured by:

Phone: 1-800-635-2123

Vogel Seed & Fertilizer LLC

1891 Spring Valley Rd.

Jackson, WI 53037

Product Use: Granular blended fertilizer for general horticultural use.

Not recommended for: Not recommended for use in or around bodies of water.

Section 2 Hazards

| GHS ratings | |
|-----------------|---|
| Eye Corrosive | 2A Eye irritant: Subcategory 2A, reversible in 21 days. |
| Carcinogen | 1B Presumed Human Carcinogen, Based on demonstrated animal carcinogenicity |
| GHS Hazards | |
| H319 | Causes serious eye irritation |
| H350 | May cause cancer |
| GHS Precautions | |
| P201 | Obtain special instructions before use |
| P202 | Do not handle until all safety precautions have been read and understood |
| P264 | Wash ... thoroughly after handling |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection |
| P281 | Use personal protective equipment as required |
| P305+P351+P338 | IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing |
| P308+P313 | IF exposed or concerned: Get medical advice/attention |
| P337+P313 | If eye irritation persists, get medical advice/attention |
| P405 | Store locked up |

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| P501 | Dispose of contents/container in accordance with local, state, and federal laws. |
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Signal Word: Danger



Section 3 Composition

| Description | CAS | Content |
|------------------------------------|-------------|----------------|
| Ammonium phosphate monobasic | 7722-76-1 | Varies |
| Ammonium Sulfate | 7783-20-2 | Varies |
| Biodac | Biodac | Varies |
| Bio-solids | 308066-19-5 | Varies |
| Calcium Oxide | 1305-78-8 | Varies |
| Calcium Sulfate | 778-18-9 | Varies |
| Copper Oxide | 1317-38-0 | Varies |
| Copper Sulfate | 7758-99-8 | Varies |
| Diatomaceous Earth | 61790-53-2 | Varies |
| Dicyandiamide | 461-58-5 | Varies |
| Dolomite Granules (limestone) | 163859-88-1 | Varies |
| Iron Oxide | 1309-37-1 | Varies |
| Iron Sulfate | 7720-78-7 | Varies |
| Isobutylidene Diurea | 6104-30-9 | Varies |
| Kaolin Clay | 13332-58-7 | Varies |
| Lime | 16389-88-1 | Varies |
| Magnesium Ammonium Phosphate | 13478-16-5 | Varies |
| Magnesium Oxide | 1309-48-4 | Varies |
| Manganese Oxide | 1344-43-0 | Varies |
| Manganese Sulfate | 7785-87-7 | Varies |
| Monoammonium Phosphate | 7783-28-0 | Varies |
| N-(n-Butyl)thiophosphoric triamide | 94317-64-3 | Varies |
| N-methyl pyrrolidone | 872-50-4 | Varies |
| Potassium | 13845-36-8 | Varies |
| Potassium Chloride | 7447-40-7 | Varies |
| Potassium Magnesium Sulfate | 14977-37-8 | Varies |
| Prodiamine | 29091-21-2 | Varies |
| Propylene Glycol | 57-55-6 | Varies |
| Silica Dioxide | 7631-86-9 | Varies |
| Sodium Calcium Borate | 1319-33-1 | Varies |
| Sodium Chloride | 7647-14-5 | Varies |

| | | |
|----------------------------|------------|--------|
| Sodium Molybdate | 7631-95-1 | Varies |
| Sulfate of Potash | 7778-80-5 | Varies |
| Sulfate of Potash magnesia | 17977-38-8 | Varies |
| Urea Formaldehyde polymer | 9011-05-6 | Varies |
| Urea Granular | 57-13-6 | Varies |
| Wolftrax DDP | 7439-89-6 | Varies |
| Zinc Oxide | 1314-13-2 | Varies |
| Zinc Sulfate | 7733-02-0 | Varies |

Section 4 First Aid

Inhalation: Remove to fresh air, if irritation of lungs persists contact physician .

Eye Contact: Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

Skin Contact: Wash with soap and water. Contact physician if irritation persists.

Ingestion: No emergency medical treatment necessary.

General Advice: If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Most important symptoms and affects, both acute and delayed: Aside from the information found under Section 4 First Aid and

Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

Indication of any immediate medical attention and special treatment needed

Notes to Physician: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Have the Safety Data Sheet, and if available, the product container or label with you when calling a poison control center or doctor, or going for treatment.

Section 5 Fire Fighting

Flash point: N/A LEL: N/A UEL: N/A

Suitable extinguishing media: Water fog of fine spray. Dry Chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam.

Unsuitable extinguishing media: None.

Special hazards arising from the substance or mixture

Hazardous combustion products: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Nitrogen oxides, Hydrogen fluoride, Hydrogen chloride, Carbon monoxide, Carbon dioxide.

Unusual Fire and Explosion Hazards: Container may melt from gas generation in a fire situation Pneumatic conveying and other mechanical handling operations can generate combustible dust. To reduce the potential for dust explosions, do not permit dust to accumulate. Dense smoke is produced when product burns.

Advice for firefighters

Fire Fighting Procedures: Keep people away. Isolate fire and deny unnecessary entry. Soak thoroughly with water to cool and prevent re-ignition. If material is molten, do not apply direct water stream. Use fine water spray or foam. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. Hand held dry chemical or carbon dioxide extinguishers may be used on small fires.

Move container from fire area if this is possible without hazard. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage. Review the "Accidental Release Measures" and the "Ecological Information" sections for this SDS.

Special protective equipment for firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves) If protective equipment is not available or not used, fight fire from a protected location or safe distance.

Section 6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Environmental precautions; prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12 Ecological information.

Small spills: Sweep up, collect in suitable and properly labeled containers.

Section 7 Handling and Storage

Precautions for safe handling: Keep out of reach of children. Do not swallow. Avoid breathing dust or mist. Avoid contact with eyes, skin, and clothing. Keep away from heat, sparks, and flame. Good housekeeping and controlling of dusts are necessary for safe handling of product. Wash thoroughly after handling. Use with adequate ventilation.

Conditions for safe storage: Store in a dry place. Store in original container. Do not store near food, foodstuffs, drugs or potable water supplies.

Section 8 Exposure and Personal Protection

| Substance | OSHA Exposure Limit / Notes |
|------------------------------|--|
| Ammonium phosphate monobasic | PNOR: 15 mg/m ³ total / 5 mg/m ³ resp |
| Ammonium Sulfate | PNOR: 15 / 5 mg/m ³ |
| Benfluralin | PNOR: 15 / 5 mg/m ³ |
| Bifenthrin | PNOR: 15 / 5 mg/m ³ |
| Biodac | PNOR: 15 / 5 mg/m ³ (check SDS) |
| Bio-solids | Variable composition, PNOR or specific contaminants |
| Calcium Oxide | 5 mg/m ³ (TWA) |
| Calcium Sulfate | PNOR: 15 / 5 mg/m ³ |
| Copper Oxide | Fume: 0.1 mg/m ³ (as Cu, TWA); Dusts/mists/salts: 1 mg/m ³ |
| Copper Sulfate | 1 mg/m ³ (as Cu, TWA) |
| Diatomaceous Earth | PNOR unless crystalline silica present (then silica PEL 0.05 mg/m ³) |
| Dicyandiamide | PNOR: 15 / 5 mg/m ³ |
| Dimethylamine dicamba | PNOR: 15 / 5 mg/m ³ |
| Dithiopyr | PNOR: 15 / 5 mg/m ³ |
| Imidacloprid | PNOR: 15 / 5 mg/m ³ |
| Iron Oxide | 10 mg/m ³ (TWA total particulate) |
| Iron Sulfate | PNOR: 15 / 5 mg/m ³ |
| Isobutylidene diurea | PNOR: 15 / 5 mg/m ³ |
| Kaolin Clay | PNOR unless crystalline silica present (then silica PEL 0.05 mg/m ³) |
| Lime | CaO = 5 mg/m ³ ; otherwise PNOR |
| Magnesium Ammonium Phosphate | PNOR: 15 / 5 mg/m ³ |

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|------------------------------------|--|
| Magnesium Oxide | 15 mg/m ³ total dust / 5 mg/m ³ resp |
| Manganese Oxide | 5 mg/m ³ CEILING |
| Manganese Sulfate | 5 mg/m ³ CEILING |
| MCPPP-P Dimethylamine Salt | PNOR: 15 / 5 mg/m ³ |
| Monoammonium Phosphate | PNOR: 15 / 5 mg/m ³ |
| N-(n-Butyl)thiophosphoric triamide | PNOR: 15 / 5 mg/m ³ |
| N-methyl pyrrolidone | No federal OSHA PEL (Cal/OSHA = 1 ppm) |
| Oxadiazon | PNOR: 15 / 5 mg/m ³ |
| Pendimethalin | PNOR: 15 / 5 mg/m ³ |
| Potassium | PNOR unless specific compound |
| Potassium Chloride | PNOR: 15 / 5 mg/m ³ |
| Potassium Magnesium Sulfate | PNOR: 15 / 5 mg/m ³ |
| Prodiamine | PNOR: 15 / 5 mg/m ³ |
| Propylene Glycol | No federal OSHA PEL (check SDS) |
| Silica Dioxide | If respirable crystalline silica: 0.05 mg/m ³ (TWA); otherwise PNOR |
| Sodium Calcium Borate | PNOR: 15 / 5 mg/m ³ |
| Sodium Chloride | PNOR: 15 / 5 mg/m ³ |
| Sodium Molybdate | PNOR: 15 / 5 mg/m ³ (check SDS for Mo-specific limits) |
| Sulfate of Potash | PNOR: 15 / 5 mg/m ³ |
| Sulfate of Potash magnesia | PNOR: 15 / 5 mg/m ³ |
| Sulfentrazone | PNOR: 15 / 5 mg/m ³ |
| Trifluralin | PNOR: 15 / 5 mg/m ³ |
| Urea Formaldehyde polymer | Formaldehyde monomer PEL: 0.75 ppm TWA; polymer dust: PNOR |
| Urea Granular | PNOR: 15 / 5 mg/m ³ |
| Wolftrax DDP | PNOR: 15 / 5 mg/m ³ (check SDS) |
| Zinc Oxide | Fume: OSHA PEL listed; Dust: PNOR (15 / 5 mg/m ³) |
| Zinc Sulfate | PNOR: 15 / 5 mg/m ³ |

Section 9 Physical Properties

| | |
|--|---|
| <p>Appearance Heterogenous mixture</p> <p>Physical State Solid</p> | <p>Odor Earthy, Sulfur like</p> <p>Specific Gravity (SG) ~1.33-2.66</p> |
|--|---|

Section 10 Stability and Reactivity

STABLE

Incompatibilities: None known. Not Applicable

Hazardous Decomposition: Not established. Not Applicable

Hazardous polymerization will not occur.

Section 11 Toxicological Information

Acute Toxicity

This product is not expected to be acutely toxic by oral, dermal, or inhalation exposure when handled in accordance with label and safety instructions. Ingestion of large amounts may cause gastrointestinal irritation (nausea, vomiting, diarrhea).

Skin Corrosion/Irritation

Prolonged or repeated skin contact with fertilizer dust may cause mild, transient irritation, dryness, or redness.

Serious Eye Damage/Irritation

Dust or granules may cause mechanical irritation, redness, or tearing. Effects are expected to be temporary.

Respiratory or Skin Sensitization

Not expected to be a sensitizer. Prolonged inhalation of dust may cause irritation of the nose, throat, and upper respiratory tract.

Germ Cell Mutagenicity / Carcinogenicity / Reproductive Toxicity

This product does not contain ingredients classified by OSHA, IARC, NTP, or ACGIH as carcinogenic, mutagenic, or reproductive hazards.

STOT – Single Exposure

May cause transient irritation to eyes, skin, or respiratory tract upon significant exposure to dust.

STOT – Repeated Exposure

Chronic exposure to high levels of nuisance dust may cause lung or airway irritation. No systemic organ effects are anticipated from normal handling and use.

Aspiration Hazard

Not expected to present an aspiration hazard.

Additional Information

This product is a mixture of mineral salts commonly used in fertilizer.

Toxicological data on the components indicate low acute oral and dermal toxicity.

| CAS Number | Description | | Carcinogen Rating |
|------------|-------------------|--|-------------------|
| 16389-88-1 | Dolomite Granules | | |

Dolomite granules: Limestone (Dolomite granules) is not listed on the NTP, IARC or OSHA lists of carcinogens. Crystalline silica, a naturally occurring component of limestone, is listed by IARC but not by NTP or OSHA. IARC has determined that there is sufficient evidence for carcinogenicity to experimental animals exposed to crystalline silica and limited evidence for carcinogenicity to humans. "Limited evidence" means that a causal relationship is possible; however, other explanations such as chance, bias or confounding factors cannot adequately be excluded. NTP has proposed (1989) to list crystalline silica based on the IARC determination. The quantity of crystalline silica in limestone, being part of a naturally occurring mined material, vary based on where and when the material is mined. As such the exact percentage of crystalline silica in this product cannot be accurately calculated between individual batches of this product. In order to provide our end users with the most relevant safety information and err on the side of caution and in accordance with the GHS standards set forth for crystalline silica stating that any product containing more than 0.1% crystalline silica must be marked with a Carcinogen hazard classification this product bears this mark even in cases where it may not be strictly required

Section 12 Ecological Information

Ecotoxicity

This product is not classified as hazardous to the environment under OSHA or GHS criteria. Components are common mineral nutrients. At high concentrations, runoff may contribute to eutrophication of surface waters, potentially causing algal growth and oxygen depletion.

Persistence and Degradability

Inorganic salts are generally soluble in water and dissociate into naturally occurring ions. These materials are not expected to persist in the environment.

Bioaccumulative Potential

Bioaccumulation is not expected for the inorganic components of this product.

Mobility in Soil

Granular product is water-soluble and may move through soil with water. Nutrient mobility depends on soil type and local conditions.

Other Adverse Effects

No known significant effects or critical hazards when used according to label instructions. Avoid uncontrolled release to the environment.

Section 13 Disposal Considerations

Disposal Methods: 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 Transportation

UN Number: Not applicable

UN Proper Shipping Name: Not regulated

Transport Hazard Class(es): Not regulated

Packing Group: Not applicable

Environmental Hazards: Not classified as a marine pollutant

Special Precautions for User: Avoid creating dust during handling; prevent spillage to minimize environmental impact.

Transport in Bulk (per Annex II of MARPOL 73/78 and the IBC Code): Not applicable

Additional Information:

This product is a solid, non-flammable, non-toxic granular fertilizer.

No special transport requirements under DOT, IATA, or IMDG regulations apply.

Local or regional regulations may apply; consult applicable transport authorities.

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

Section 15 Regulations

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312

Chronic Health Hazard

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313 .

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)

WARNING: This product contains a chemical(s) known to the State of California to cause birth defects or other reproductive harm.

Pennsylvania (Worker and Community Right-To-KnowAct): Pennsylvania Hazardous Substances List and/or Pennsylvania Environmental Hazardous Substance List:

To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

Pennsylvania (Worker and Community Right-To-KnowAct): Pennsylvania Special Hazardous Substances List:

To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

United States TSCA Inventory (TSCA)

Section 16 Other Information

Hazard Rating System NFPA

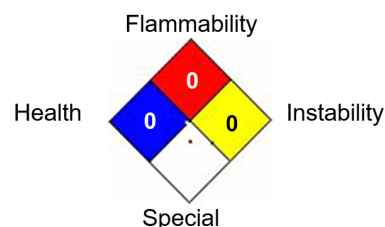
Health : 0 Fire : 0 Reactivity : 0

Hazardous Material Information System (HMIS)

| | |
|------------------------|--------------------------------|
| HEALTH | <input type="text" value="0"/> |
| FLAMMABILITY | <input type="text" value="0"/> |
| PHYSICAL HAZARD | <input type="text" value="0"/> |
| PERSONAL PROTECTION | <input type="text"/> |

HMIS & NFPA Hazard Rating Legend
* = Chronic Health Hazard
0 = INSIGNIFICANT
1 = SLIGHT
2 = MODERATE
3 = HIGH

National Fire Protection Association (NFPA)



The information herein is provided in good faith and believed to be accurate as of the effective date shown above . However, no warranty, express or implied, is given . Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped . Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the

safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.