

## 1. Identification

**Product identifier** PROTIVATE™ NU5-LUX  
**Synonym** PROTIVATE™ NU5-LUX 0-5-0  
**Recommended use** Seed Nutrition.  
**Recommended restrictions** None known.

### Manufacturer/Importer/Supplier/Distributor information

**Manufacturer/Supplier** Koch Agronomic Services, LLC  
 4111 E 37th St N  
 Wichita, KS 67220 US  
 kochmsds@kochind.com  
 1.866.863.5550

**Emergency** For Chemical Emergency  
 Call CHEMTREC day or night  
 USA/Canada - 1.800.424.9300  
 Mexico - 1.800.681.9531  
 Outside USA/Canada - 1.703.527.3887  
 (collect calls accepted)

## 2. Hazard(s) identification

**Physical hazards** Not classified.  
**Health hazards** Serious eye damage/eye irritation Category 1  
 Carcinogenicity (inhalation) Category 2  
 Specific target organ toxicity, repeated exposure Category 2  
**OSHA defined hazards** Combustible dust

### Label elements



**Signal word** Danger

**Hazard statement** May form combustible dust concentrations in air. Causes serious eye damage. Suspected of causing cancer by inhalation. May cause damage to organs through prolonged or repeated exposure.

### Precautionary statement

**Prevention** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Prevent dust accumulation to minimize explosion hazard. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Do not breathe dust. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. Observe good industrial hygiene practices.

**Response** 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/doctor. Take off contaminated clothing and wash it before reuse. In case of fire: Use appropriate media to extinguish. Collect spillage.

**Storage** Store locked up.

**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.

**Hazard(s) not otherwise classified (HNOC)** None known.

Supplemental information None.

### 3. Composition/information on ingredients

#### Mixtures

| Chemical name                 | CAS number | %      |
|-------------------------------|------------|--------|
| Plant Based Polysaccharide    | 9005-25-8  | 5 - 20 |
| Mica                          | 12001-26-2 | < 16   |
| Manganese sulfate monohydrate | 10034-96-5 | < 15   |
| Ferrous sulfate monohydrate   | 17375-41-6 | < 10   |
| Titanium dioxide              | 13463-67-7 | < 10   |
| Zinc Sulfate Monohydrate      | 7446-19-7  | < 5    |

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Hydrated forms of chemical substances are exempt from the TSCA Inventory as mixtures. See the anhydrous form of the chemical substances for the TSCA Inventory.

### 4. First-aid measures

|   |   |
|---|---|
| <b>Inhalation</b>   | Move to fresh air. Call a physician if symptoms develop or persist.   |
| <b>Skin contact</b>   | Wash off with soap and water. Get medical attention if irritation develops and persists.  |
| <b>Eye contact</b>  | Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.  |
| <b>Ingestion</b>  | Rinse mouth. Get medical attention if symptoms occur.   |
| <b>Most important symptoms/effects, acute and delayed</b>                     | Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Dusts may irritate the respiratory tract, skin and eyes. Coughing. Prolonged exposure may cause chronic effects. |
| <b>Indication of immediate medical attention and special treatment needed</b> | Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.  |
| <b>General information</b>  | IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.  |

### 5. Fire-fighting measures

|  |  |
|--|--|
| <b>Suitable extinguishing media</b>                                  | Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture. Powder. Apply extinguishing media carefully to avoid creating airborne dust. |
| <b>Unsuitable extinguishing media</b>                                | Do not use water jet as an extinguisher, as this will spread the fire.   |
| <b>Specific hazards arising from the chemical</b>                    | Explosion hazard: Avoid generating dust; fine dust dispersed in air in sufficient concentrations and in the presence of an ignition source is a potential dust explosion hazard.     |
| <b>Special protective equipment and precautions for firefighters</b> | Self-contained breathing apparatus and full protective clothing must be worn in case of fire.  |
| <b>Fire fighting equipment/instructions</b>                          | In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.   |
| <b>Specific methods</b>  | Use standard firefighting procedures and consider the hazards of other involved materials.   |
| <b>General fire hazards</b>  | May form combustible dust concentrations in air.   |

### 6. Accidental release measures

|  |  |
|--|--|
| <b>Personal precautions, protective equipment and emergency procedures</b> | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Use only non-sparking tools. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Wear appropriate protective equipment and clothing during clean-up. Do not breathe dust. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS. |
|--|--|

## Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Collect dust using a vacuum cleaner equipped with HEPA filter. Prevent product from entering drains. Stop the flow of material, if this is without risk.

Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Following product recovery, flush area with water.

Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS.

## Environmental precautions

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

### Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Minimize dust generation and accumulation. Avoid significant deposits of material, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Combustible dust clouds may be created where operations produce fine material (dust). Handling and processing operations should be conducted in accordance with 'best practices' (e.g. NFPA-654). Explosion-proof general and local exhaust ventilation. Do not breathe dust. Do not get this material in contact with eyes. Avoid prolonged exposure. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

### Conditions for safe storage, including any incompatibilities

Store locked up. Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

| Components                                     | Type    | Value                | Form                 |
|--|---------|----------------------|----------------------|
| Manganese sulfate monohydrate (CAS 10034-96-5) | Ceiling | 5 mg/m <sup>3</sup>  |                      |
| Plant Based Polysaccharide (CAS 9005-25-8)     | PEL     | 5 mg/m <sup>3</sup>  | Respirable fraction. |
|  |         | 15 mg/m <sup>3</sup> | Total dust.          |
| Sodium molybdate dihydrate (CAS 10102-40-6)    | PEL     | 5 mg/m <sup>3</sup>  |                      |
| Titanium dioxide (CAS 13463-67-7)              | PEL     | 15 mg/m <sup>3</sup> | Total dust.          |
| Zinc oxide (CAS 1314-13-2)                     | PEL     | 5 mg/m <sup>3</sup>  | Respirable fraction. |
|  |         | 5 mg/m <sup>3</sup>  | Fume.                |
|  |         | 15 mg/m <sup>3</sup> | Total dust.          |

#### US. OSHA Table Z-3 (29 CFR 1910.1000)

| Components                                 | Type | Value                | Form                 |
|--|------|----------------------|----------------------|
| Mica (CAS 12001-26-2)                      | TWA  | 20 mppcf             |                      |
| Plant Based Polysaccharide (CAS 9005-25-8) | TWA  | 5 mg/m <sup>3</sup>  | Respirable fraction. |
|  |      | 15 mg/m <sup>3</sup> | Total dust.          |
|  |      | 50 mppcf             | Total dust.          |
|  |      | 15 mppcf             | Respirable fraction. |
| Zinc oxide (CAS 1314-13-2)                 | TWA  | 5 mg/m <sup>3</sup>  | Respirable fraction. |

**US. OSHA Table Z-3 (29 CFR 1910.1000)**

| Components | Type | Value    | Form                 |
|------------|------|----------|----------------------|
|            |      | 15 mg/m3 | Total dust.          |
|            |      | 50 mppcf | Total dust.          |
|            |      | 15 mppcf | Respirable fraction. |

**US. ACGIH Threshold Limit Values**

| Components                                     | Type | Value      | Form                 |
|--|------|------------|----------------------|
| Ferrous sulfate monohydrate (CAS 17375-41-6)   | TWA  | 1 mg/m3    |                      |
| Manganese sulfate monohydrate (CAS 10034-96-5) | TWA  | 0.1 mg/m3  | Inhalable fraction.  |
|  |      | 0.02 mg/m3 | Respirable fraction. |
| Mica (CAS 12001-26-2)                          | TWA  | 0.1 mg/m3  | Respirable fraction. |
| Plant Based Polysaccharide (CAS 9005-25-8)     | TWA  | 10 mg/m3   |                      |
| Sodium molybdate dihydrate (CAS 10102-40-6)    | TWA  | 0.5 mg/m3  | Respirable fraction. |
| Titanium dioxide (CAS 13463-67-7)              | TWA  | 10 mg/m3   |                      |
| Zinc oxide (CAS 1314-13-2)                     | STEL | 10 mg/m3   | Respirable fraction. |
|  | TWA  | 2 mg/m3    | Respirable fraction. |

**US. NIOSH: Pocket Guide to Chemical Hazards**

| Components                                     | Type    | Value    | Form        |
|--|---------|----------|-------------|
| Ferrous sulfate monohydrate (CAS 17375-41-6)   | TWA     | 1 mg/m3  |             |
| Manganese sulfate monohydrate (CAS 10034-96-5) | STEL    | 3 mg/m3  | Fume.       |
|  | TWA     | 1 mg/m3  | Fume.       |
| Mica (CAS 12001-26-2)                          | TWA     | 3 mg/m3  | Respirable. |
| Plant Based Polysaccharide (CAS 9005-25-8)     | TWA     | 5 mg/m3  | Respirable. |
|  |         | 10 mg/m3 | Total       |
| Zinc oxide (CAS 1314-13-2)                     | Ceiling | 15 mg/m3 | Dust.       |
|  | STEL    | 10 mg/m3 | Fume.       |
|  | TWA     | 5 mg/m3  | Dust.       |
|  |         | 5 mg/m3  | Fume.       |

**Biological limit values**

No biological exposure limits noted for the ingredient(s).

**Appropriate engineering controls**

Explosion-proof general and local exhaust ventilation. Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn. Use only appropriately classified electrical equipment and powered industrial trucks. Provide eyewash station.

## Individual protection measures, such as personal protective equipment

|                                       |  |
|---------------------------------------|--|
| <b>Eye/face protection</b>            | Wear safety glasses with side shields (or goggles).  |
| <b>Skin protection</b>                |  |
| <b>Hand protection</b>                | Wear appropriate chemical resistant gloves.  |
| <b>Skin protection</b>                |  |
| <b>Other</b>                          | Wear suitable protective clothing.   |
| <b>Respiratory protection</b>         | Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Chemical respirator with organic vapor cartridge, full facepiece, dust and mist filter.  |
| <b>Thermal hazards</b>                | Wear appropriate thermal protective clothing, when necessary.  |
| <b>General hygiene considerations</b> | Observe any medical surveillance requirements. When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. |

## 9. Physical and chemical properties

### Appearance

**Physical state** Solid.

**Form** Powder.

**Color** White.

**Odor** Not available.

**Odor threshold** Not available.

**pH** Not available.

**Melting point/freezing point** Not available.

**Initial boiling point and boiling range** Not available.

**Flash point** Not available.

**Evaporation rate** Not available.

**Flammability (solid, gas)** Not available.

### Upper/lower flammability or explosive limits

**Explosive limit - lower (%)** Not available.

**Explosive limit - upper (%)** Not available.

**Vapor pressure** Not available.

**Vapor density** Not available.

**Relative density** Not available.

### Solubility(ies)

**Solubility (water)** Not available.

**Partition coefficient (n-octanol/water)** Not available.

**Auto-ignition temperature** Not available.

**Decomposition temperature** Not available.

**Viscosity** Not available.

### Other information

**Explosive properties** Not explosive.

**Oxidizing properties** Not oxidizing.

## 10. Stability and reactivity

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

**Chemical stability** Material is stable under normal conditions.

**Possibility of hazardous reactions** No dangerous reaction known under conditions of normal use.

**Conditions to avoid** Keep away from heat, sparks and open flame. Contact with incompatible materials. Minimize dust generation and accumulation.

**Incompatible materials** Acids.  
**Hazardous decomposition products** Metal oxides.

## 11. Toxicological information

### Information on likely routes of exposure

**Inhalation** Suspected of causing cancer by inhalation. Dust may irritate respiratory system. Prolonged inhalation may be harmful.  
**Skin contact** Dust or powder may irritate the skin.  
**Eye contact** Causes serious eye damage.  
**Ingestion** May cause discomfort if swallowed.

**Symptoms related to the physical, chemical and toxicological characteristics** Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Dusts may irritate the respiratory tract, skin and eyes. Coughing.

### Information on toxicological effects

#### Acute toxicity

| Components | Species | Test Results |
|------------|---------|--------------|
|------------|---------|--------------|

Manganese sulfate monohydrate (CAS 10034-96-5)

#### Acute

##### Oral

|      |     |            |
|------|-----|------------|
| LD50 | Rat | 2150 mg/kg |
|------|-----|------------|

Plant Based Polysaccharide (CAS 9005-25-8)

#### Acute

##### Dermal

|      |  |              |
|------|--|--------------|
| LD50 |  | > 5000 mg/kg |
|------|--|--------------|

##### Oral

|      |  |               |
|------|--|---------------|
| LD50 |  | > 50000 mg/kg |
|------|--|---------------|

#### Chronic

##### Other

|       |  |              |
|-------|--|--------------|
| NOAEL |  | > 5000 mg/kg |
|-------|--|--------------|

Titanium dioxide (CAS 13463-67-7)

#### Acute

##### Oral

|      |     |              |
|------|-----|--------------|
| LD50 | Rat | > 5000 mg/kg |
|------|-----|--------------|

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.

**Serious eye damage/eye irritation** Causes serious eye damage.

### Respiratory or skin sensitization

**Respiratory sensitization** Not a respiratory sensitizer.

**Skin sensitization** This product is not expected to cause skin sensitization.

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** Suspected of causing cancer.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

|                                   |                                     |
|-----------------------------------|-------------------------------------|
| Titanium dioxide (CAS 13463-67-7) | 2B Possibly carcinogenic to humans. |
|-----------------------------------|-------------------------------------|

#### NTP Report on Carcinogens

Not listed.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

**Reproductive toxicity** This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure** Not classified.

|   |   |
|---|---|
| <b>Specific target organ toxicity - repeated exposure</b> | May cause damage to organs through prolonged or repeated exposure.  |
| <b>Aspiration hazard</b>                                  | Not an aspiration hazard.   |
| <b>Chronic effects</b>                                    | Prolonged inhalation may be harmful. May cause damage to organs through prolonged or repeated exposure. Prolonged exposure may cause chronic effects. |

## 12. Ecological information

**Ecotoxicity** Very toxic to aquatic life with long lasting effects.

| Components                               | Species | Test Results  |
|--|---------|---|
| Titanium dioxide (CAS 13463-67-7)        |         |   |
| <b>Aquatic</b>                           |         |   |
| <i>Acute</i>                             |         |   |
| Crustacea                                | EC50    | Daphnia magna > 100 mg/l, 48 Hours                            |
| Fish                                     | LL50    | Oryzias latipes > 100 mg/l, 96 Hours                          |
| Zinc oxide (CAS 1314-13-2)               |         |   |
| <b>Aquatic</b>                           |         |   |
| Crustacea                                | LC50    | Water flea (Daphnia magna) 0.098 mg/l, 48 Hours               |
| Zinc Sulfate Monohydrate (CAS 7446-19-7) |         |   |
| <b>Aquatic</b>                           |         |   |
| Crustacea                                | EC50    | Water flea (Ceriodaphnia dubia) 0.06 mg/l, 48 hours           |
| Fish                                     | LC50    | Hirame, flounder (Paralichthys olivaceus) < 10 mg/l, 96 hours |

|                                      |  |
|--------------------------------------|--|
| <b>Persistence and degradability</b> | No data is available on the degradability of any ingredients in the mixture. |
| <b>Bioaccumulative potential</b>     | No data available.   |
| <b>Mobility in soil</b>              | No data available.   |
| <b>Other adverse effects</b>         | No data available.   |

## 13. Disposal considerations

|  |  |
|--|--|
| <b>Disposal instructions</b>                 | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations. |
| <b>Local disposal regulations</b>            | Dispose in accordance with all applicable regulations.   |
| <b>Hazardous waste code</b>                  | The waste code should be assigned in discussion between the user, the producer and the waste disposal company.   |
| <b>Waste from residues / unused products</b> | Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).   |
| <b>Contaminated packaging</b>                | Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.   |

## 14. Transport information

### DOT

|                                   |  |
|-----------------------------------|--|
| <b>UN number</b>                  | UN3077   |
| <b>UN proper shipping name</b>    | Environmentally hazardous substances, solid, n.o.s. (Zinc oxide) |
| <b>Transport hazard class(es)</b> |  |
| <b>Class</b>                      | 9  |
| <b>Subsidiary risk</b>            | -  |
| <b>Label(s)</b>                   | 9  |
| <b>Packing group</b>              | III  |
| <b>Environmental hazards</b>      |  |
| <b>Marine pollutant</b>           | Yes.   |

**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

DOT (Road/Rail): Non-bulk shipments of this material are non-regulated for domestic ground transportation when they meet the requirements of 49 CFR 171.4(c).

**Special provisions** 8, 146, 335, A112, B54, IB8, IP3, N20, T1, TP33  
**Packaging exceptions** 155  
**Packaging non bulk** 213  
**Packaging bulk** 240

#### IATA

**UN number** UN3077  
**UN proper shipping name** Environmentally hazardous substance, solid, n.o.s. (Zinc oxide)  
**Transport hazard class(es)**  
**Class** 9  
**Subsidiary risk** -  
**Packing group** III  
**Environmental hazards** Yes.  
**ERG Code** 9L  
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

#### IMDG

**UN number** UN3077  
**UN proper shipping name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc oxide)  
**Transport hazard class(es)**  
**Class** 9  
**Subsidiary risk** -  
**Packing group** III  
**Environmental hazards**  
**Marine pollutant** Yes.  
**EmS** F-A, S-F  
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

## 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

Ferrous sulfate monohydrate (CAS 17375-41-6) Listed.  
Manganese sulfate monohydrate (CAS 10034-96-5) Listed.  
Zinc oxide (CAS 1314-13-2) Listed.

#### SARA 304 Emergency release notification

Not regulated.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

**Toxic Substances Control Act (TSCA)** All components on the TSCA 8(b) inventory are designated "active".

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

##### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical** Yes

**Classified hazard categories** Combustible dust  
Serious eye damage or eye irritation  
Carcinogenicity  
Specific target organ toxicity (single or repeated exposure)



**SARA 313 (TRI reporting)**

| Chemical name                 | CAS number | % by wt. |
|-------------------------------|------------|----------|
| Manganese sulfate monohydrate | 10034-96-5 | < 15     |
| Zinc oxide                    | 1314-13-2  | < 25     |
| Zinc Sulfate Monohydrate      | 7446-19-7  | < 5      |

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Manganese sulfate monohydrate (CAS 10034-96-5)

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Contains component(s) regulated under the Safe Drinking Water Act.**US state regulations****US. Massachusetts RTK - Substance List**

Ferrous sulfate monohydrate (CAS 17375-41-6)

Mica (CAS 12001-26-2)

Plant Based Polysaccharide (CAS 9005-25-8)

Titanium dioxide (CAS 13463-67-7)

Zinc oxide (CAS 1314-13-2)

Zinc Sulfate Monohydrate (CAS 7446-19-7)

**US. New Jersey Worker and Community Right-to-Know Act**

Ferrous sulfate monohydrate (CAS 17375-41-6)

Manganese sulfate monohydrate (CAS 10034-96-5)

Mica (CAS 12001-26-2)

Titanium dioxide (CAS 13463-67-7)

Zinc oxide (CAS 1314-13-2)

Zinc Sulfate Monohydrate (CAS 7446-19-7)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Manganese sulfate monohydrate (CAS 10034-96-5)

Mica (CAS 12001-26-2)

Plant Based Polysaccharide (CAS 9005-25-8)

Titanium dioxide (CAS 13463-67-7)

Zinc oxide (CAS 1314-13-2)

Zinc Sulfate Monohydrate (CAS 7446-19-7)

**US. Rhode Island RTK**

Ferrous sulfate monohydrate (CAS 17375-41-6)

Mica (CAS 12001-26-2)

Plant Based Polysaccharide (CAS 9005-25-8)

Titanium dioxide (CAS 13463-67-7)

Zinc oxide (CAS 1314-13-2)

**California Proposition 65****WARNING:** This product can expose you to Titanium dioxide, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).**California Proposition 65 - CRT: Listed date/Carcinogenic substance**

Titanium dioxide (CAS 13463-67-7)

Listed: September 2, 2011

**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

Titanium dioxide (CAS 13463-67-7)

**International Inventories**

| Country(s) or region | Inventory name   | On inventory (yes/no)* |
|----------------------|--|------------------------|
| Australia            | Australian Inventory of Industrial Chemicals (AICIS)                   | No                     |
| Canada               | Domestic Substances List (DSL)   | No                     |
| Canada               | Non-Domestic Substances List (NDSL)                                    | No                     |
| China                | Inventory of Existing Chemical Substances in China (IECSC)             | No                     |
| Europe               | European Inventory of Existing Commercial Chemical Substances (EINECS) | No                     |
| Europe               | European List of Notified Chemical Substances (ELINCS)                 | No                     |

| Country(s) or region        | Inventory name  | On inventory (yes/no)* |
|-----------------------------|---|------------------------|
| Japan                       | Inventory of Existing and New Chemical Substances (ENCS)          | No                     |
| Korea                       | Existing Chemicals List (ECL)                                     | No                     |
| New Zealand                 | New Zealand Inventory   | Yes                    |
| Philippines                 | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | No                     |
| Taiwan                      | Taiwan Chemical Substance Inventory (TCSI)                        | No                     |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory                     | Yes                    |

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

|                     |   |
|---------------------|---|
| Issue date          | 29-April-2022   |
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| Further information | Refer to:<br>OSHA 3371-08 2009, Hazard Communication Guidance for Combustible Dusts<br>NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids |

### NFPA ratings



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