

SAFETY DATA SHEET

MAG 1: ATOMIZED GRINDED NaNO₂ IN PVC

Version Number 1.0
Revision Date 01/27/2020

Page 1 of 19
Print Date 01/28/2020

SAFETY DATA SHEET

MAG 1: ATOMIZED GRINDED NaNO₂ IN PVC

Section 1. Identification

GHS product identifier : MAG 1: ATOMIZED GRINDED NaNO₂ IN PVC
 Chemical name : Mixture
 CAS number : Mixture
 Other means of identification : FO20046193
 Product type : solid

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

Product use : Industrial applications. Plastics.

Supplier's details : **POLYONE CORPORATION**
 33587 Walker Road, Avon Lake, OH 44012
 1 (440) 930-1000 or 1 (866) POLYONE

Emergency telephone number (with hours of operation) : CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).

Section 2. Hazards identification

This mixture has not been evaluated as a whole for health effects. All ingredients are bound in a PVC polymer matrix and potential for hazardous exposure as shipped is minimal. PVC resin is manufactured from Vinyl Chloride Monomer (VCM). PVC resin manufacturers take special efforts to strip residual VCM from their resins. Residual VCM in the resin is typically below 8.5 ppm. However, VCM is a known carcinogen. The end-user (fabricator) should take necessary precautions (mechanical ventilation, local exhaust, respiratory protection, etc.) to protect employees from exposure to any vapors or dusts that may be released during heating or fabrication. See Sections 8 and 11 for special precautions. After handling, always wash hands thoroughly with soap and water.

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : COMBUSTIBLE DUSTS
 ACUTE TOXICITY (oral) - Category 3
 ACUTE TOXICITY (inhalation) - Category 1
 EYE IRRITATION - Category 2B
 CARCINOGENICITY - Category 1B

Percentage of the mixture consisting of ingredient(s) of unknown oral

SAFETY DATA SHEET


MAG 1: ATOMIZED GRINDED NaNO₂ IN PVC

Version Number 1.0
Revision Date 01/27/2020

Page 2 of 19
Print Date 01/28/2020

toxicity: 21.6 %
Percentage of the mixture consisting of ingredient(s) of unknown
dermal toxicity: 99.5 %
Percentage of the mixture consisting of ingredient(s) of unknown
inhalation toxicity: 21.6 %

GHS label elements
Hazard pictograms

Signal word
Hazard statements

- : Danger
- : May form combustible dust concentrations in air.
Fatal if inhaled.
Toxic if swallowed.
Causes eye irritation.
May cause cancer.

Precautionary statements
General
Prevention
Response
Storage
Disposal
Supplemental label elements
Hazards not otherwise classified

- : Not applicable.
- : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Wear respiratory protection. Use only outdoors or in a well-ventilated area. Do not breathe dust or mist. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.
- : IF exposed or concerned: Get medical attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. 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 attention.
- : Store locked up.
- : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- : Keep container tightly closed.
- : None known.
Not available.

SAFETY DATA SHEET


MAG 1: ATOMIZED GRINDED NaNO₂ IN PVC

Version Number 1.0
Revision Date 01/27/2020

Page 3 of 19
Print Date 01/28/2020

Section 3. Composition/information on ingredients

Substance/mixture : Mixture
Chemical name : Mixture
Other means of identification : FO20046193

CAS number/other identifiers

| Ingredient name | % | CAS number |
|-----------------|---------|------------|
| Sodium nitrite | 75 - 90 | 7632-00-0 |
| Sodium nitrate | 0.3 - 1 | 7631-99-4 |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures
Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least

SAFETY DATA SHEET


MAG 1: ATOMIZED GRINDED NaNO₂ IN PVC

Version Number 1.0
Revision Date 01/27/2020

Page 4 of 19
Print Date 01/28/2020

- 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** :
- Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed
Potential acute health effects

- Eye contact** : Causes eye irritation.
- Inhalation** : Fatal if inhaled. Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : Toxic if swallowed.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
irritation
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
- Skin contact** : No specific data.
- Ingestion** : No specific data.

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

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without

MAG 1: ATOMIZED GRINDED NaNO₂ IN PVC

Version Number 1.0
Revision Date 01/27/2020

Page 5 of 19
Print Date 01/28/2020

suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

- Suitable extinguishing media** : Use dry chemical powder.
Unsuitable extinguishing media : Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture.

Specific hazards arising from the chemical : May form explosible dust-air mixture if dispersed.

- Hazardous thermal decomposition products** : May emit Hydrogen Chloride (HCl).
 Decomposition products may include the following materials:
 carbon dioxide
 carbon monoxide
 halogenated compounds

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

SAFETY DATA SHEET

**MAG 1: ATOMIZED GRINDED NaNO₂ IN PVC**

Version Number 1.0
Revision Date 01/27/2020

Page 6 of 19
Print Date 01/28/2020

- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage**Precautions for safe handling**

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe dust. Do not ingest. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse

SAFETY DATA SHEET


MAG 1: ATOMIZED GRINDED NaNO₂ IN PVC

Version Number 1.0
Revision Date 01/27/2020

Page 7 of 19
Print Date 01/28/2020

- Advice on general occupational hygiene** : container.
Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store in a well-ventilated place. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

| Ingredient name | Exposure limits |
|-----------------|-----------------|
| Sodium nitrite | None. |
| Sodium nitrate | None. |

- Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

SAFETY DATA SHEET


MAG 1: ATOMIZED GRINDED NaNO₂ IN PVC

Version Number 1.0
Revision Date 01/27/2020

Page 8 of 19
Print Date 01/28/2020

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles. If operating conditions cause high dust concentrations to be produced, use dust goggles.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties
Appearance

- Physical state** : solid [Powder.]
- Color** : NO PIGMENT
- Odor** : Not available.
- Odor threshold** : Not available.

SAFETY DATA SHEET


MAG 1: ATOMIZED GRINDED NaNO₂ IN PVC

Version Number 1.0
Revision Date 01/27/2020

Page 9 of 19
Print Date 01/28/2020

| | | |
|---|---|--|
| pH | : | Not available. |
| Melting point | : | Not available. |
| Boiling point | : | Not available. |
| Flash point | : | Not available. |
| Burning time | : | Not available. |
| Burning rate | : | Not available. |
| Evaporation rate | : | Not available. |
| Flammability (solid, gas) | : | Not available. |
| Lower and upper explosive (flammable) limits | : | Lower: Not available. Upper: Not available. |
| Vapor pressure | : | Not available. |
| Vapor density | : | Not available. |
| Relative density | : | Not available. |
| Solubility | : | Not available. |
| Solubility in water | : | Not available. |
| Partition coefficient: n-octanol/water | : | Not available. |
| Auto-ignition temperature | : | Not available. |
| Decomposition temperature | : | Not available. |
| SADT | : | Not available. |
| Viscosity | : | Dynamic: Not available. Kinematic: Not available. |

Aerosol product

| | | |
|---|---|----------------|
| Heat of combustion | : | Not available. |
| Ignition distance | : | Not available. |
| Enclosed space ignition - Time equivalent | : | Not available. |
| Enclosed space ignition - Deflagration density | : | Not available. |
| Flame height | : | Not available. |
| Flame duration | : | Not available. |

Section 10. Stability and reactivity

| | | |
|---|---|---|
| Reactivity | : | No specific test data related to reactivity available for this product or its ingredients. |
| Chemical stability | : | Stable under recommended storage and handling conditions (see Section 7). |
| Possibility of hazardous reactions | : | Under normal conditions of storage and use, hazardous reactions will not occur. |
| Conditions to avoid | : | Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures |

SAFETY DATA SHEET


MAG 1: ATOMIZED GRINDED NaNO₂ IN PVC

 Version Number 1.0
 Revision Date 01/27/2020

 Page 10 of 19
 Print Date 01/28/2020

- against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Prevent dust accumulation.
- Incompatible materials** : Avoid contact with acetal homopolymers and acetyl homopolymers during processing.
Reactive or incompatible with the following materials:
oxidizing materials
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

This mixture has not been evaluated as a whole for health effects. Exposure effects listed are based on existing health data for the individual components which comprise the mixture.

Information on toxicological effects
Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|------------------------------|-----------------------------|---------|-------------|----------|
| Sodium nitrate | | | | |
| | LD50 Oral | Rat | 1,267 mg/kg | - |
| Remarks - Inhalation: | No applicable toxicity data | | | |
| Remarks - Dermal: | No applicable toxicity data | | | |
| Sodium nitrite | | | | |
| | LD50 Oral | Rat | 157.9 mg/kg | - |
| | LC50 Inhalation | Rat | 0.0055 Mg/l | 4 h |
| Remarks - Dermal: | No applicable toxicity data | | | |

Conclusion/Summary : Mixture.Not fully tested.

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|-------------------------|----------------------|---------|-------|----------|-------------|
| Sodium nitrite | Eyes - Mild irritant | Rabbit | | 24 hrs | - |

Conclusion/Summary

- Skin** : Mixture.Not fully tested.
Eyes : Mixture.Not fully tested.
Respiratory : Mixture.Not fully tested.

Sensitization

Conclusion/Summary

SAFETY DATA SHEET

MAG 1: ATOMIZED GRINDED NaNO₂ IN PVC

Version Number 1.0
Revision Date 01/27/2020

Page 11 of 19
Print Date 01/28/2020

Skin : Mixture.Not fully tested.
Respiratory : Mixture.Not fully tested.

Mutagenicity

Conclusion/Summary : Mixture.Not fully tested.

Carcinogenicity

Conclusion/Summary : Mixture.Not fully tested.

Classification

| Product/ingredient name | OSHA | IARC | NTP |
|-------------------------|------|------|-----|
| Sodium nitrate | - | 2A | - |

Reproductive toxicity

Conclusion/Summary : Mixture.Not fully tested.

Teratogenicity

Conclusion/Summary : Mixture.Not fully tested.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes eye irritation.
Inhalation : Fatal if inhaled. Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
Skin contact : No known significant effects or critical hazards.
Ingestion : Toxic if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

SAFETY DATA SHEET


MAG 1: ATOMIZED GRINDED NaNO₂ IN PVC

Version Number 1.0
Revision Date 01/27/2020

Page 12 of 19
Print Date 01/28/2020

- Eye contact** : Adverse symptoms may include the following: irritation, watering, redness
- Inhalation** : Adverse symptoms may include the following: respiratory tract irritation, coughing
- Skin contact** : No specific data.
- Ingestion** : No specific data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure
Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Potential chronic health effects

- Conclusion/Summary** : Mixture. Not fully tested.
- General** : Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.
- Carcinogenicity** : May cause cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.

Numerical measures of toxicity
Acute toxicity estimates

| Route | ATE value |
|---------------------|---------------|
| Oral | 202.7 mg/kg |
| Route | ATE value |
| Inhalation (vapors) | 0.007062 mg/l |

SAFETY DATA SHEET


MAG 1: ATOMIZED GRINDED NaNO₂ IN PVC

 Version Number 1.0
 Revision Date 01/27/2020

 Page 13 of 19
 Print Date 01/28/2020

Section 12. Ecological information
Toxicity

| Product/ingredient name | Result | Species | Exposure |
|---|--------------------------------------|---------------------------------------|----------|
| Sodium nitrate | | | |
| | Acute LC50 1 Mg/l Marine water | Fish - Fish | 96 h |
| Remarks - Acute - Fish: | Acute | | |
| | Acute LC50 161 Mg/l Fresh water | Aquatic invertebrates. Crustaceans | 48 h |
| Remarks - Acute - Aquatic invertebrates: | Acute | | |
| | Acute LC50 3.581 Mg/l Fresh water | Aquatic invertebrates. Daphnia | 48 h |
| Remarks - Acute - Aquatic invertebrates: | Acute | | |
| | Acute NOEC 34.4 Mg/l Marine water | Aquatic plants - Algae | 72 h |
| Remarks - Acute - Aquatic plants: | Chronic | | |
| | Chronic NOEC 1.6 Mg/l Fresh water | Fish - Fish | 120 d |
| Remarks - Chronic - Fish: | Chronic | | |
| Remarks - Chronic - Aquatic invertebrates: | No applicable toxicity data | | |
| Sodium nitrite | | | |
| | Acute LC50 0.00016 Mg/l Fresh water | Fish - Fish | 96 h |
| Remarks - Acute - Fish: | Acute | | |
| | Acute LC50 1.1 Mg/l Fresh water | Aquatic invertebrates. Crustaceans | 48 h |
| Remarks - Acute - Aquatic invertebrates: | Acute | | |
| | Acute EC50 159 Mg/l Marine water | Aquatic plants - Algae | 72 h |
| Remarks - Acute - Aquatic plants: | Acute | | |
| | Acute EC50 1,600 Mg/l Marine water | Aquatic plants - Algae | 96 h |
| Remarks - Acute - Aquatic plants: | Acute | | |
| | Chronic NOEC 0.912 Mg/l Marine water | Fish - Fish | 35 d |
| Remarks - Chronic - Fish: | Chronic | | |

SAFETY DATA SHEET

MAG 1: ATOMIZED GRINDED NaNO₂ IN PVC

Version Number 1.0
Revision Date 01/27/2020

Page 14 of 19
Print Date 01/28/2020

| | |
|--|-----------------------------|
| Remarks - Chronic - Aquatic invertebrates.: | No applicable toxicity data |
|--|-----------------------------|

Conclusion/Summary : Not available.

Persistence and degradability

Conclusion/Summary : Not available.

Bioaccumulative potential

| Product/ingredient name | LogPow | BCF | Potential |
|-------------------------|--------|-----|-----------|
| Sodium nitrite | -3.7 | - | low |

Mobility in soil

Soil/water partition coefficient (KOC) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. 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. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

United States - RCRA Acute hazardous waste "P" List: Not listed

United States - RCRA Toxic hazardous waste "U" List: Not listed

MAG 1: ATOMIZED GRINDED NaNO₂ IN PVC

Version Number 1.0
Revision Date 01/27/2020

Page 15 of 19
Print Date 01/28/2020

Section 14. Transport information

U.S.DOT 49CFR Ground/Air/Water : RQ, UN1500, Sodium Nitrite Mixture, 5.1 (6.1), PGIII

International Air ICAO/IATA : RQ, UN1500, Sodium Nitrite Mixture, 5.1 (6.1), PGIII

International Water IMO/IMDG : RQ, UN1500, Sodium Nitrite Mixture, 5.1 (6.1), PGIII

Section 15. Regulatory information

U.S. Federal regulations : **United States - TSCA 12(b) - Chemical export notification:** None of the components are listed.
United States - TSCA 4(a) - Final Test Rules: Not listed
United States - TSCA 4(a) - ITC Priority list: Not listed
United States - TSCA 4(a) - Proposed test rules: Not listed
United States - TSCA 4(f) - Priority risk review: Not listed
United States - TSCA 5(a)2 - Final significant new use rules: Listed **Sodium nitrite**

United States - TSCA 5(a)2 - Proposed significant new use rules: Not listed
United States - TSCA 5(e) - Substances consent order: Not listed
United States - TSCA 6 - Final risk management: Not listed
United States - TSCA 6 - Proposed risk management: Not listed
United States - TSCA 8(a) - Chemical risk rules: Not listed
United States - TSCA 8(a) - Dioxin/Furane precursor: Not listed
United States - TSCA 8(a) - Chemical Data Reporting (CDR): Not determined
United States - TSCA 8(a) - Preliminary assessment report (PAIR): Not listed
United States - TSCA 8(c) - Significant adverse reaction (SAR): Not listed
United States - TSCA 8(d) - Health and safety studies: Not listed
United States - EPA Clean water act (CWA) section 307 - Priority pollutants: Not listed
United States - EPA Clean water act (CWA) section 311 - Hazardous substances: Listed
United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Flammable substances: Not listed

SAFETY DATA SHEET

MAG 1: ATOMIZED GRINDED NaNO₂ IN PVC

Version Number 1.0
Revision Date 01/27/2020

Page 16 of 19
Print Date 01/28/2020

United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Toxic substances: Not listed
United States - Department of commerce - Precursor chemical: Not listed

Clean Air Act Section 112(b) : Not listed
Hazardous Air Pollutants (HAPs)
Clean Air Act Section 602 Class I Substances : Not listed
Clean Air Act Section 602 Class II Substances : Not listed
DEA List I Chemicals (Precursor Chemicals) : Not listed
DEA List II Chemicals (Essential Chemicals) : Not listed

US. EPA CERCLA Hazardous Substances (40 CFR 302)

| Chemical Name | CAS-No. | RQ for component |
|----------------|-----------|----------------------|
| Sodium nitrite | 7632-00-0 | 100 lb(s) 45.4 kg |

SARA 311/312

Classification : COMBUSTIBLE DUSTS
ACUTE TOXICITY - oral - Category 3
ACUTE TOXICITY - inhalation - Category 1
EYE IRRITATION - Category 2B
CARCINOGENICITY - Category 1B

Composition/information on ingredients

| Name | % | Classification |
|------------------------------|---------------|--|
| Sodium nitrite | >= 75 - <= 90 | ACUTE TOXICITY - oral - Category 3 ACUTE TOXICITY - inhalation - Category 1 EYE IRRITATION - Category 2B |
| Ethene, chloro-, homopolymer | >= 10 - <= 25 | COMBUSTIBLE DUSTS |
| Sodium nitrate | >= 0.3 - < 1 | ACUTE TOXICITY - oral - Category 4 CARCINOGENICITY - Category 1B |

SAFETY DATA SHEET

MAG 1: ATOMIZED GRINDED NaNO₂ IN PVC

Version Number 1.0
Revision Date 01/27/2020

Page 17 of 19
Print Date 01/28/2020

SARA 313**Form R - Reporting requirements**

| Product name | CAS number | % |
|----------------|------------|---------------|
| Sodium nitrite | 7632-00-0 | >= 75 - <= 90 |

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

- Massachusetts** : None of the components are listed.
New York : The following components are listed:
 Sodium nitrite
New Jersey : The following components are listed:
 Ethene, chloro-, homopolymer
 Sodium nitrite
Pennsylvania : The following components are listed:
 Sodium nitrite
 Sodium nitrate

California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

United States inventory (TSCA 8b) : All components are active or exempted.

Canada inventory : All components are listed or exempted.

International regulations**Inventory list**

- Australia** : All components are listed or exempted.
Canada : All components are listed or exempted.
China : All components are listed or exempted.
Europe inventory : All components are listed or exempted.
Japan : All components are listed or exempted.
New Zealand : All components are listed or exempted.
Philippines : All components are listed or exempted.
Republic of Korea : All components are listed or exempted.
Taiwan : All components are listed or exempted.
Turkey : Not determined.
United States : All components are active or exempted.

SAFETY DATA SHEET


MAG 1: ATOMIZED GRINDED NaNO₂ IN PVC

 Version Number 1.0
 Revision Date 01/27/2020

 Page 18 of 19
 Print Date 01/28/2020

Section 16. Other information
Hazardous Material Information System (U.S.A.)

| | | |
|------------------|---|---|
| Health | * | 4 |
| Flammability | | 3 |
| Physical hazards | | 0 |
| | | |

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

History

Date of printing : 01/28/2020
 Date of issue/Date of revision : 01/27/2020
 Date of previous issue : 00/00/0000
 Version : 1.0

Key to abbreviations

: ATE = Acute Toxicity Estimate
 : BCF = Bioconcentration Factor
 : GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 : IATA = International Air Transport Association
 : IBC = Intermediate Bulk Container
 : IMDG = International Maritime Dangerous Goods
 : LogPow = logarithm of the octanol/water partition coefficient
 : MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 : UN = United Nations

References : Not available.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. Particularly this information may not be valid for such material used in conjunction with any other

SAFETY DATA SHEET



MAG 1: ATOMIZED GRINDED NaNO₂ IN PVC

Version Number 1.0
Revision Date 01/27/2020

Page 19 of 19
Print Date 01/28/2020

materials or in any process, unless specified in the text.