



Sentinel 24-7 Zero HVAC White Mold & Mildew Resistant Coating

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 3/31/2023

Supersedes: All previous versions

Version: 3.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : Sentinel 24-7 Zero HVAC White Mold & Mildew Resistant Coating

Product form : Mixture

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

Uses of the substance/Mixture : Antimicrobial coating for HVAC use

1.3. Details of the supplier of the safety data sheet

Sentinel Products Inc.
8901 Wyoming Avenue North
Brooklyn Park, MN 55445
Phone: (763) 571-0630
Toll-free: (800)-373-0633
www.senpro.com

1.4. Emergency telephone number

Emergency number : 1-866-359-5661

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Eye Irritation 2 H319

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS07

Signal word (GHS-US) : **Warning**

Hazard statements (GHS-US) : H319 - Causes serious eye irritation.

Precautionary statements (GHS-US) : P264 - Wash hands thoroughly after handling.

P280 - Wear eye protection/face protection.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.

P337+P317 - If eye irritation persists: Get medical help.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Note
Titanium Dioxide	(CAS No) 13463-67-7	10.0 – 30.0	**
2-aminoethanol	(CAS No) 141-43-5	0.1 – 1.0	
3-iodo-2-propynyl-butylcarbamate	(CAS No) 55406-53-6	0.1 – 1.0	
Butanedioic acid, sulfo-1,4-bis(2-ethylhexyl) ester, sodium salt	(CAS No) 577-11-7	0.1 – 1.0	
Sodium Nitrite	(CAS No) 7631-99-4	0.1 – 1.0	

*The specific chemical identity and exact percentage of composition has been withheld as a trade secret

**The raw material applicable is considered hazardous as an airborne dust. During the use of Sentinel 24-7 Zero HVAC White Mold & Mildew Resistant Coating these materials are bound within the product and do not present a significant risk of exposure. When 24-7 Zero HVAC has dried and cured, sanding or similar actions could create dust and subsequent exposure is possible.

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SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : If exposed or concerned, get medical attention/advice. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use. Never give anything to an unconscious person.
- First-aid measures after inhalation : IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if breathing is affected. If breathing is difficult, supply oxygen.
- First-aid measures after skin contact : IF ON SKIN (or clothing): Remove affected clothing and wash all exposed skin with water for at least 15 minutes. If irritation develops or persists, get medical attention.
- First-aid measures after eye contact : IF IN EYES: Immediately flush with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do so. If pain, blinking, or irritation develops or persists, get medical attention. Continue rinsing.
- First-aid measures after ingestion : IF SWALLOWED: Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center or medical professional. Seek medical attention.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : May cause respiratory irritation.
- Symptoms/injuries after skin contact : May cause skin irritation.
- Symptoms/injuries after eye contact : Direct contact with the eyes is likely to be irritating.
- Symptoms/injuries after ingestion : May cause gastrointestinal irritation.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide.
- Unsuitable extinguishing media : Water may be unsuitable as an extinguishing media, but helpful in keeping adjacent containers cool.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Not determined.
- Explosion hazard : Not determined.
- Reactivity : No data available.

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not dispose of fire-fighting water in the environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : No specific emergency measures are required other than good laboratory hygiene and safety practices.

6.1.1. For non-emergency personnel

- Protective equipment : Wear Protective equipment as described in Section 8.
- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Wear suitable protective clothing, gloves and eye or face protection. Approved supplied-air respirator, in case of emergency.

6.2. Environmental precautions

Avoid release to the environment. Keep out of sewer, streams, lakes, and other groundwaters.

6.3. Methods and material for containment and cleaning up

- For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
- Methods for cleaning up : Solidify spills with inert solids, such as clay, vermiculite or diatomaceous earth as soon as possible. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13).

6.4. Reference to other sections

No additional information available

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Keep container closed when not in use.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Does not require any specific or particular technical measures.

Storage conditions : Store in dry, well-ventilated area. Keep container tightly closed in original container protected from sunlight. Keep from freezing. Store locked up.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Titanium Dioxide (13463-67-7)	
Remark (ACGIH)	TWA - 10 mg/m ³
Remark (US OSHA)	PEL - 15 mg/m ³

2-aminoethanol (141-43-5)	
Remark (ACGIH)	TWA - 3 PPM, STEL - 6 PPM
Remark (US OSHA)	TWA - 3 PPM

8.2. Exposure controls

Appropriate engineering controls : Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Ensure adequate ventilation, especially in confined areas.

Personal protective equipment : Gloves. Wear protective clothing. Protective goggles.



Hand protection : Use gloves chemically resistant to this material when prolonged or repeated contact could occur. Gloves should be classified under Standard EN 374 or ASTM F1296. Suggested glove materials are: Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, PVC or vinyl. Suitable gloves for this specific application can be recommended by the glove supplier.

Eye protection : Use eye protection suitable to the environment. Avoid direct contact with eyes.

Skin and body protection : Wear long sleeves, and chemically impervious PPE/coveralls to minimize bodily exposure.

Respiratory protection : Where vapor, mist, or dust exceed PELs or other applicable OELs, use NIOSH-approved respiratory protective equipment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: White, dries White.
Odor	: Slight latex
Odor Threshold	: No data available
pH	: 8.25 – 9.0
Relative evaporation rate (butylacetate=1)	: <1, water
Melting point	: No data available
Freezing point	: 0 °C (32 °F)
Boiling point	: 100 °C (212 °F)
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available

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Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: 120 - 130 KU
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

VOC content	: < 5 g/L (Calculated)
	*A zero V.O.C. coating by industry standard means the product contains less than 5 grams of V.O.C.'s per liter. Tints and colorants may add V.O.C.'s to the product.

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Excessive heat which may cause the closed container to rupture. Excessive cold which may cause the closed container to rupture.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

Thermal decomposition may yield monomers, carbon monoxide, carbon dioxide, nitrogen oxides (NO_x), and Sulphur Dioxide (SO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified - Based on ingredients and their concentrations in the product, the product is not classified as acutely toxic.
Skin corrosion/irritation	: Not classified - Based on ingredients and their concentrations in the product, the product is not classified for skin irritation.
Serious eye damage/irritation	: No data for the mixture. Based on ingredients and their concentrations in the product, the product is classified as Category 2: causes serious eye irritation.
Respiratory or skin sensitisation	: No data for the mixture. Based on ingredients and their concentrations in the product, the product is not classified as a sensitizer.
Germ cell mutagenicity	: Not classified - Based on ingredients and their concentrations in the product, the product is not classified for germ cell mutagenicity.
Carcinogenicity	: No data for the mixture. Based on ingredients and their concentrations in the product, the product is not classified as a carcinogen. IARC: Titanium Dioxide: Group 2B: possibly carcinogenic to humans. Titanium dioxide is listed by IARC as possibly carcinogenic to humans (Group 2B). This listing is based on inadequate evidence of carcinogenicity in humans and sufficient evidence in experimental animals. In lifetime inhalation studies of rats, airborne respirable-sized titanium dioxide particles have been shown to cause lung tumors at concentrations associated with substantial particle lung burdens and consequential pulmonary overload and inflammation. However, other laboratory animals such as mice and hamsters did not develop lung tumors under similar testing with titanium dioxide. Furthermore, human epidemiology studies do not suggest an association between occupational exposure to titanium dioxide and risk for cancer. **The raw material applicable are considered hazardous as an airborne dust. During the use of Sentinel 24-7 Zero HVAC White Mold & Mildew Resistant Coating these materials are bound within the product and do not present a significant risk of exposure. When 24-7 Zero HVAC has dried and cured, sanding or similar actions could create dust and subsequent exposure is possible.

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Reproductive toxicity	: No data for the mixture. Based on ingredients and their concentrations in the product, the product is not classified as a Reproductive Toxicant.
Specific target organ toxicity (single exposure)	: Not classified - Based on ingredients and their concentrations in the product, the product is not classified for STOT - single exposure.
Specific target organ toxicity (repeated exposure)	: Not classified - Based on ingredients and their concentrations in the product, the product is not classified for STOT - repeated exposure.
Aspiration hazard	: No data for the mixture. Based on ingredients and their concentrations in the product, and the viscosity of the product, the product is not classified as an aspiration hazard.
Symptoms/injuries after inhalation	: No data for the mixture.
Symptoms/injuries after skin contact	: No data for the mixture.
Symptoms/injuries after eye contact	: No data for the mixture. Based on ingredients and their concentrations in the product, the product causes eye irritation.
Symptoms/injuries after ingestion	: No data for the mixture.

Additional information: No data is available for the mixture. The information shown is based on the profiles of the ingredients and their concentrations in the product.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Aquatic toxicity rating not determined. All possible measures should be taken to prevent release into the environment.

12.2. Persistence and degradability

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Persistence and degradability	Not established.
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12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Do not dump in any sewers, on the ground or into any body of water.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

In accordance with DOT

Not hazardous for transport

Additional information

Other information : No supplementary information available.

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

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All chemical substances in this product are listed or exempt from listing in the EPA (Environment Protection Agency) TSCA (Toxic Substances Control Act) Inventory

15.2. International regulations

CANADA

No additional information available.

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15.3. US State regulations

Component	CAS #	State
Titanium Dioxide	13463-67-7	New Jersey, Pennsylvania, Rhode Island
Propylene glycol	57-55-6	Pennsylvania, New Jersey, Minnesota
Sodium Nitrite	7632-00-0	Massachusetts, New Jersey, Pennsylvania
Magnesium nitrate	10377-60-3	Massachusetts, New Jersey, Pennsylvania

California Proposition 65: WARNING! This product contains chemicals known to the state of California to cause cancer, birth defects, or other reproductive harm.

Titanium Dioxide (airborne particles of respirable size)

SECTION 16: Other information

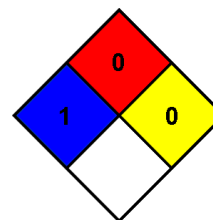
Indication of changes : Revision 3.0: - 31 March 2023 – Formulary Update

Other information : Author: KAD

NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard : 0 - Materials that will not burn.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health : 1

Flammability : 0

Physical : 0

Personal Protection :

Note: The end user is responsible for determining PPE needs. Choose appropriate PPE that will protect employees from the hazards the material will present under the conditions of use.

The information in this document is believed to be correct as of the date issued. However, no warranty of merchantability, fitness for any particular purpose, or any other warranty is expressed or is to be implied regarding the accuracy or completeness of this information, the results to be obtained from the use of this product or the hazards related to its use. This information and product are furnished on the condition that the person receiving them shall make his own determination as to the suitability of the product for his particular purpose and on the condition that he assume the risk of his use thereof.