



# Sentinel 24-7 Zero HVAC Black Mold & Mildew Resistant Coating

## Safety Data Sheet

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

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Version: 2.0

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

#### 1.1. Product identifier

Product name : Sentinel 24-7 Zero HVAC Black Mold & Mildew Resistant Coating with Antimicrobial Product Protection

Product form : Mixture

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

Uses of the substance/Mixture : Antimicrobial coating

#### 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  
Skin Sensitization Category 1 H317

#### 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  
H317 - May cause an allergic skin reaction

Precautionary statements (GHS-US) : P261 - Avoid breathing mist/vapors/spray.  
P264 - Wash hands thoroughly after handling.  
P272 - Contaminated work clothing should not be allowed out of the workplace  
P280 - Wear eye protection/face protection, protective gloves.  
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.  
P333+P313 - If skin irritation or rash occurs: get medical advice/attention.  
P363 - Wash contaminated clothing before reuse.  
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 + P313 - If eye irritation persists: Get medical advice/attention.  
P501 - Dispose of contents/container to licensed waste handling facility

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS-US)

No data available

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

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Name	Product identifier	%
Butanedioic acid, sulfo-, 1,4-bis(2-ethylhexyl) ester, sodium salt	(CAS No) 577-11-7	0 - 0.5
Zinc pyrithione	(CAS No) 13463-41-7	Proprietary*
Zinc oxide	(CAS No) 1314-13-2	Proprietary*
Sodium Nitrite	(CAS No) 7632-00-0	Proprietary*

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

### 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. Get medical attention if you feel unwell.

#### 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. Sand.
- 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.

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### 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 : Soak up spills with inert solids, such as clay 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

## 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 a cool place.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

<b>Copper dinitrate (3251-23-8)</b>	
Remark (ACGIH - Resp. 8 hour TWA – Dust and Mist)	TLV 1 mg/m <sup>3</sup> (as CU)
Remark (ACGIH - Resp. 8 hour TWA - Fume)	TLV 0.2 mg/m <sup>3</sup> (as CU)
Remark (NIOSH - Resp. 8 hour TWA – Dust and Mist)	REL 1.0 mg/m <sup>3</sup> (as CU)

<b>Zinc Oxide (1314-13-2)</b>	
Remark (US OSHA - 8 hour TWA - Fume)	PEL - 5 mg/m <sup>3</sup>
Remark (US OSHA - 8 hours TWA – Respirable Fraction)	PEL - 5 mg/m <sup>3</sup>
Remark (US OSHA - 8 hour TWA – Total Dust)	PEL - 15 mg/m <sup>3</sup>
Remark (US OSHA – 15 Minute STEL – Respirable Fraction )	PEL - 10 mg/m <sup>3</sup>
Remark (NIOSH – CEIL - Dust)	REL - 15 mg/m <sup>3</sup>
Remark (NIOSH – Total 10 hour TWA – Dust & Fumes)	REL - 5 mg/m <sup>3</sup>
Remark (ACGIH – 15 Minute STEL - Fume)	TLV - 10 mg/m <sup>3</sup>
Remark (ACGIH – 8 hour TWA – Respirable Fraction)	TLV - 2 mg/m <sup>3</sup>

<b>Carbon black, amorphous (1333-86-4)</b>	
Remark (ACGIH)	TWA - 3 mg/m <sup>3</sup>
Remark (US OSHA)	PEL - 3.5 mg/m <sup>3</sup>
Remark (NIOSH)	TWA - 0.1 mg/m <sup>3</sup>

<b>Talc, Magnesium silicate hydrate (14807-96-6)</b>	
Remark (ACGIH)	TWA - 2 mg/m <sup>3</sup> Respirable fraction
Remark (US OSHA)	TWA – 0.3 mg/m <sup>3</sup> Total Dust. TWA – 0.1 mg/m <sup>3</sup> Respirable TWA – 20 mppcf TWA – 2.4 mppcf Respirable
Remark (NIOSH)	TWA - 2 mg/m <sup>3</sup> Respirable

<b>Crystalline Silica, Quartz (14808-60-7)</b>	
Remark (US OSHA - Resp. 8 hour TWA)	PEL 0.05 mg/m <sup>3</sup>
Remark (ACGIH - Resp. 8 hour TWA)	TLV 0.025 mg/m <sup>3</sup>

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<b>Crystalline Silica, Quartz (14808-60-7)</b>	
Remark (NIOSH - Resp. 8 hour TWA)	REL 0.05 mg/m <sup>3</sup>
<b>2-aminoethanol (141-43-5)</b>	
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. Use explosion-proof equipment with flammable materials. 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

: Use NIOSH-approved dust/particulate respirator. 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	: Black.
Odor	: Slight.
Odor Threshold	: No data available
pH	: 8.25 – 8.75
Relative evaporation rate (butylacetate=1)	: No data available
Relative evaporation rate (ether=1)	: < 1 Slower than ether
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 0 °C (215 - 290 °F)
Flash point	: None to boiling
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
Relative density	: No data available
Solubility	: Complete solubility in water.
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.

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### 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

Freezing, extreme heat. Both may cause container to fail.

#### 10.5. Incompatible materials

None known.

#### 10.6. Hazardous decomposition products

Carbon oxides (CO, CO<sub>2</sub>).

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

No data available for the mixture.

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 2A: causes serious eye irritation.
Respiratory or skin sensitisation	: Not classified - Based on ingredients and their concentrations in the product, the product is not classified for respiratory sensitization. It is classified as Category 1: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified - Based on ingredients and their concentrations in the product, the product is not classified for germ cell mutagenicity.
Carcinogenicity	: IARC: Carbon black, amorphous: Group 2B: possibly carcinogenic to humans. IARC: Crystalline Silica: Group 1: carcinogenic to humans.  Risk of cancer cannot be excluded with prolonged exposure. However, the raw materials applicable are considered hazardous as an airborne dust. During the use of Sentinel 24-7 Zero HVAC Black 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 Black has dried and cured, sanding or similar actions could create dust and subsequent exposure is possible.
Reproductive toxicity	: No data for the mixture. Based on ingredients and their concentrations in the product, the product is not classified for reproductive toxicity.
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. Based on ingredients and their concentrations in the product, the product may cause an allergic skin reaction.
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.

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### 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

##### Sentinel 24-7 Zero HVAC Black Mold & Mildew Resistant Coating

Persistence and degradability

Not established.

#### 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 discharge to public wastewater systems without permit of pollution control authorities. No discharge to surface waters is allowed without an NPDES permit.

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

##### Sentinel 24-7 Zero HVAC Black Mold & Mildew Resistant Coating

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

#### 15.2. International regulations

##### CANADA

No additional information available.

#### 15.2.2. National regulations

No additional information available.

#### 15.3. US State regulations

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

Carbon Black, amorphous (airborne particles of respirable size) (CAS 133-86-4)

Silica, crystalline (quartz) (airborne particles of respirable size) (CAS 14808-60-7)

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Component	CAS #	State
Zinc compounds; zinc oxide	13463-41-7, 1314-13-2	New Jersey, Pennsylvania, Massachusetts
Sodium Nitrite	7632-00-0	New Jersey, Pennsylvania, Massachusetts
Magnesium nitrate	10377-60-3	New Jersey, Pennsylvania, Massachusetts
Propylene Glycol	57-55-6	New Jersey, Pennsylvania
Glycerine	56-81-5	New Jersey, Pennsylvania
Carbon black, amorphous	4666-86-4	New Jersey, Pennsylvania, Massachusetts
Silica, crystalline (quartz)	14808-60-7	New Jersey, Pennsylvania, Massachusetts
Talc, Magnesium silicate hydrate	14807-96-6	New Jersey, Pennsylvania, Massachusetts
Water	7732-18-5	Pennsylvania, New Jersey

### SECTION 16: Other information

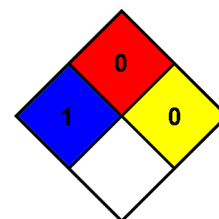
Indication of changes : Revision 2.0: - 21 July 2019 – Formula Update.

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 :

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