



# 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

Date of issue: 2/8/2016

Supersedes: All previous versions

Version: 1.0

### 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 for use in/on HVAC ductwork and duct liner

#### 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)

Skin corrosion/Irritation 2	H315
Serious eye damage/eye Irritation 1	H318
Skin Sensitization 1	H317
Carcinogenicity 2	H351
Reproductive Toxicity 2	H361

#### 2.2. Label elements

##### GHS-US labeling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

**Danger**

Hazard statements (GHS-US) :

H315 - Causes skin irritation.  
H318 - Causes serious eye damage.  
H317 - May cause an allergic skin reaction.  
H351 - Suspected of causing cancer.  
H361 - Suspected of damaging fertility or the unborn child.

Precautionary statements (GHS-US) :

P261 - Avoid breathing spray.  
P264 - Wash hands thoroughly after handling.  
P280 - Wear protective gloves and eye protection/face protection.  
P272 - Contaminated work clothing should not be allowed out of the workplace.  
P201 - Obtain special instructions before use.  
P202 - Do not handle until all safety precautions have been read and understood.  
P281 - Use personal protective equipment as required.  
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.  
P310 - Immediately call a POISON CENTER or doctor/physician.  
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.  
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.  
P362 - Take off contaminated clothing and wash before reuse.  
P308+P313 - If exposed or concerned: Get medical advice.  
P405 - Store locked up.  
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)

Percentage of mixture consisting of ingredient(s) of unknown acute toxicity: 0.0%

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

## Safety Data Sheet

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### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

Name	Product identifier	%
Diethylene glycol monobutyl ether, Glycol ether DB, Butyl carbitol, Butyl diglycol, 2-(2-Butoxyethoxy) ethanol	(CAS No) 112-34-5	Proprietary*
Carbon Black dispersion	(CAS No) Mixture	Proprietary*
Surfactant	(CAS No) Mixture	Proprietary*
Zinc pyrithione, Zinc pyridinethione	(CAS No) 13463-41-7	Proprietary*
Biocide	(CAS No) Mixture	Proprietary*
All other ingredients below their cut-off limits		

\*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. Seek medical attention.

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

- Symptoms/injuries after inhalation : May cause respiratory irritation in individuals with pre-existing conditions.
- 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 : Water spray jet. Foam. Dry powder. Carbon dioxide.
- Unsuitable extinguishing media : No information available.

#### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : Not determined.
- Explosion hazard : Not determined.
- Reactivity : No data available.
- Hazardous Combustion Products : Carbon monoxide, carbon dioxide, nitrogen oxides (NO<sub>x</sub>), sulphur dioxide (SO<sub>2</sub>).

#### 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.

# 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

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

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : If contacted on skin, wash affected area. 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 when not in use. Keep from freezing. Store upright in original container protected from sunlight. Store locked up.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

<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>Diethylene glycol monobutyl ether (112-34-5)</b>	
Remark (ACGIH)	TWA - 10 ppm inhalable fraction and vapor

<b>2-Butoxyethanol (111-76-2)</b>	
Remark (US OSHA)	TWA - 50 ppm, 240 mg/m <sup>3</sup>
Remark (NIOSH)	IDLH - 700 ppm
Remark (ACGIH)	TWA - 20 ppm

<b>Ammonia (1336-21-6)</b>	
Remark (US OSHA)	PEL - 35 mg/m <sup>3</sup>
Remark (ACGIH)	TWA - 25 ppm
Remark (ACGIH)	STEL - 35 ppm
Remark (NIOSH)	TWA - 18 mg/m <sup>3</sup>
Remark (NIOSH)	TWA - 25 ppm
Remark (NIOSH)	STEL - 27 mg/m <sup>3</sup>
Remark (NIOSH)	STEL - 35 ppm

<b>Ethylene oxide (75-2-8)</b>	
Remark (US OSHA)	STEL - 5 ppm
Remark (US OSHA)	TWA - 1 ppm

# 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

Ethylene oxide (75-2-8)	
Remark (ACGIH)	TWA - 1 ppm
Remark (NIOSH)	Ceiling - 9 mg/m <sup>3</sup>
Remark (NIOSH)	TWA - 0.18 mg/m <sup>3</sup>

### 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. Examples of preferred glove materials include: natural rubber ("latex"), neoprene, nitrile/butadiene rubber ("nitrile" or "NBR"), polyethylene, polyvinyl chloride ("PVC" or "vinyl"). The selection of a specific glove should also take into account other work to be performed with the glove, potential body reactions to glove material, and specifications/instructions by glove manufacturer.

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	: Black, dries black.
Odor	: Slight latex
Odor Threshold	: No data available
pH	: 8.7
Relative evaporation rate (butylacetate=1)	: <1.0, water
Melting point	: No data available
Freezing point	: 0 °C (32 °F)
Boiling point	: 100 °C (212 °F)
Flash point	: > 93 °C (calculated)
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	: 1.1
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: 82 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

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No data available.

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

## Safety Data Sheet

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### 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<sub>x</sub>), and Sulphur Dioxide (SO<sub>2</sub>).

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

*Toxicological information on the components of this product appears in this section when such data is available.*

Acute toxicity	: No data for the mixture. Based on ingredients and their concentrations in the product, the product is not classified as acutely toxic.
Skin corrosion/irritation	: No data for the mixture. Based on ingredients and their concentrations in the product, the product is classified as Category 2: causes 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 1: causes serious eye damage.
Respiratory or skin sensitisation	: No data for the mixture. Based on ingredients and their concentrations in the product, the product is classified as Category 1: may cause an allergic skin reaction.
Germ cell mutagenicity	: No data for the mixture. 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 classified as Category 2: Suspected of causing cancer. IARC: Carbon black, amorphous: Group 2B: possibly carcinogenic to humans.
Reproductive toxicity	: No data for the mixture. Based on ingredients and their concentrations in the product, the product is classified as Category 2: Suspected of damaging fertility or the unborn child.
Specific target organ toxicity (single exposure)	: No data for the mixture. Based on ingredients and their concentrations in the product, the product is not classified for STOT - single exposure.
Specific target organ toxicity (repeated exposure)	: No data for the mixture. 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 causes skin irritation.
Symptoms/injuries after eye contact	: No data for the mixture. Based on ingredients and their concentrations in the product, the product causes serious 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

*Ecotoxicological information on this product or its components appears in this section when such data is available.*

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.
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### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

# 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

### 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 : All disposal practices must be in compliance with all Federal, State and local laws and regulations. Wear proper protective equipment.

## 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 components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

**Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 313:** Zinc compounds, Diethylene glycol monobutyl ether, 2-Butoxyethanol.

### 15.2. International regulations

#### CANADA

No additional information available.

### 15.3. US State regulations

Component	CAS #	State
2-Butoxyethanol	111-76-2	New Jersey, Pennsylvania, Massachusetts
Carbon black, amorphous	1333-86-4	California, New Jersey, Pennsylvania, Massachusetts
Ethylene Oxide	75-21-8	California, New Jersey, Pennsylvania, Massachusetts, Rhode Island
Zinc oxide fume	1314-13-2	Massachusetts
Zinc compounds; zinc oxide	13463-41-7, 1314-13-2	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.

## SECTION 16: Other information

Indication of changes : Revision 1.0: - 8 February 2016 - New SDS Created.

Other information : Author: KAD

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



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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 : B

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