



# Sentinel 315 Smoke & Soot Cleaner/Wash

## Safety Data Sheet

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

Revision date: 09/25/2015

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 315 Smoke & Soot Cleaner/Wash

Product form : Mixture

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

Use of the substance/mixture : General cleaning of smoke and carbon residues

#### 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 Category 1 H318

#### 2.2. Label elements

##### GHS-US labeling

Hazard pictograms (GHS-US) :



GHS05

Signal word (GHS-US) :

**Danger**

Hazard statements (GHS-US) :

H318 - Causes serious eye damage

Precautionary statements (GHS-US) :

P280 - Wear eye protection, protective clothing, protective gloves  
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.  
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.  
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)

No data available

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

| Name                             | Product identifier   | %            |
|----------------------------------|----------------------|--------------|
| Trisodium Phosphate Anhydrous    | (CAS No) 7601-54-9   | Proprietary* |
| Sodium Metasilicate Pentahydrate | (CAS No) 6834-92-0   | Proprietary* |
| 2-(2-butoxyethoxy)ethanol        | (CAS No) 112-34-5    | Proprietary* |
| Surfactant Blend                 | (CAS No) Proprietary | Proprietary* |

\*The component information and the exact percentage of composition has been withheld as a trade secret

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## SECTION 4: First aid measures

### 4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : IF INHALED: If breathing difficulties, dizziness, or light-headedness occur when working in areas with high vapor concentration, victim should seek air free of vapors. If breathing stops, begin artificial respiration and seek immediate medical attention.
- First-aid measures after skin contact : IF ON SKIN: Immediately rinse with plenty of soap and water (for at least 15 minutes). Remove contaminated clothing and wash before reuse. If irritation or redness develops and persists, get medical advice/attention.
- First-aid measures after eye contact : IF IN EYES: Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Remove contact lenses, if present and easy to do so. Continue rinsing. If eye irritation occurs, get medical advice/attention.
- First-aid measures after ingestion : IF SWALLOWED: Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

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

- Symptoms/injuries : May be fatal if swallowed and enters airways.
- Symptoms/injuries after inhalation : This product may cause headaches.
- Symptoms/injuries after skin contact : Contact may cause irritation. Persons with pre-existing skin disorders may be more susceptible to the effects of this material.
- Symptoms/injuries after eye contact : Direct contact with the eyes is likely to be irritating.
- Symptoms/injuries after ingestion : Burns to the mouth, esophagus and stomach.
- Chronic symptoms : No data available.

### 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 : Dry chemical. Carbon dioxide. Foam.

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

- Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.
- Reactivity : No dangerous reactions known under normal conditions of use.

### 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 : Evacuate area. Keep upwind. Ventilate area. Spill should be handled by trained clean-up crews properly equipped with respiratory equipment and full chemical protective gear (see Section 8).

#### 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

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

### 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. Foam may be used to suppress vapors.

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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). Flush residue with a large volume of water.

## 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 : Do not handle until all safety precautions have been read and understood. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not breathe mists.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Heat sources. Keep container closed when not in use. Do not allow to freeze as container may burst.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

| Trisodium Phosphate Anhydrous (7601-54-9)** |   |
|---|---|
| Remark (ACGIH)                              | 10 mg/m <sup>3</sup> (inhalable) 8-hr TWA, 3 mg/m <sup>3</sup> (respirable) 8-hr TWA  |
| Remark (US OSHA)                            | 15 mg/m <sup>3</sup> (total dust) 8-hr TWA, 5 mg/m <sup>3</sup> (respirable) 8-hr TWA |

\*\*OSHA and ACGIH have not established specific exposure limits for this material. However, OSHA and ACGIH have established limits for particulates not otherwise regulated (PNOR) and particulates not otherwise classified (PNOC) which are the least stringent exposure limits applicable to dusts.

| Sodium Metasilicate Pentahydrate (6834-92-0) |                      |
|--|----------------------|
| Remark (ACGIH)                               | OELs not established |
| Remark (US OSHA)                             | OELs not established |

While exposure limits are not assigned for this material, an exposure limit of 2 mg/m<sup>3</sup> (15 min TWA) is recommended by analogy with sodium hydroxide.

| 2-(2-butoxyethoxy)ethanol (112-34-5) |                      |
|--------------------------------------|----------------------|
| Remark (ACGIH)                       | TWA - 10 ppm         |
| Remark (US OSHA)                     | OELs not established |

| Surfactant Blend (Proprietary) |                      |
|--------------------------------|----------------------|
| Remark (ACGIH)                 | OELs not established |
| Remark (US OSHA)               | OELs not established |

### 8.2. Exposure controls

Appropriate engineering controls : Ensure adequate ventilation, especially in confined areas.  
Personal protective equipment : Gloves. 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: Natural rubber ("latex"), Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, PVC or vinyl.

Eye protection : Eye protection, including both chemical splash goggles and face shield, must be worn when possibility exists for eye contact due to spraying liquid or airborne particles.

Skin and body protection : Wear suitable protective clothing if deemed to be necessary.

Respiratory protection : An approved organic vapor respirator/supplied air or self-contained breathing apparatus must be used when vapor concentration exceeds applicable exposure limits.

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## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|   |                     |
|---|---------------------|
| Physical state                              | : Liquid            |
| Appearance                                  | : Clear             |
| Color                                       | : None              |
| Odor  | : Citrus            |
| Odor Threshold                              | : No data available |
| pH  | : 11-12             |
| Relative evaporation rate (butyl acetate=1) | : Slower than ether |
| Melting point                               | : No data available |
| Freezing point                              | : 0 °C (32 °F)      |
| Boiling point                               | : >100 °C (212 °F)  |
| Flash point                                 | : None to boiling   |
| Self ignition temperature                   | : No data available |
| Decomposition temperature                   | : No data available |
| Flammability (solid, gas)                   | : No data available |
| Vapor pressure                              | : No data available |
| Relative vapor density at 20 °C             | : No data available |
| Relative density                            | : No data available |
| Solubility                                  | : No data available |
| Log Pow                                     | : No data available |
| Log Kow                                     | : No data available |
| Viscosity, kinematic                        | : No data available |
| Viscosity, dynamic                          | : No data available |
| Explosive properties                        | : No data available |
| Oxidizing properties                        | : No data available |
| Explosive limits                            | : No data available |

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No dangerous reactions known under normal conditions of use.

### 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.

### 10.5. Incompatible materials

Avoid contact with : Strong acids.

### 10.6. Hazardous decomposition products

Thermal decomposition generates : Carbon dioxide.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

| Trisodium Phosphate Anhydrous (7601-54-9) |              |
|---|--------------|
| LD50 oral rat                             | > 4100 mg/kg |
| LD50 dermal rabbit                        | > 7500 mg/kg |

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| <b>Sodium Metasilicate Pentahydrate (6834-92-0)</b> |                      |
|---|----------------------|
| LD50 oral rat                                       | > 1100 mg/kg         |
| LD50 dermal rabbit                                  | > 5000 mg/kg         |
| LC50 Inhalation rat                                 | > 2 g/m <sup>3</sup> |

| <b>2-(2-butoxyethoxy)ethanol (112-34-5)</b> |                    |
|---|--------------------|
| LD50 oral rat                               | LD50 oral rat      |
| LD50 dermal rabbit                          | LD50 dermal rabbit |

| <b>Surfactant Blend (Proprietary)</b> |        |
|---------------------------------------|--------|
| LD50 oral rat                         | 1 g/kg |

|  |   |
|--|---|
| Skin corrosion/irritation                          | : Not classified  |
| Serious eye damage/irritation                      | : Eye Irritant Category 1   |
| Respiratory or skin sensitization                  | : Not classified  |
| Germ cell mutagenicity                             | : Not classified  |
| Carcinogenicity                                    | : Not classified  |
| Reproductive toxicity                              | : Not classified  |
| Specific target organ toxicity (single exposure)   | : Not classified  |
| Specific target organ toxicity (repeated exposure) | : Not classified  |
| Aspiration hazard                                  | : May be fatal if swallowed and enters airways.   |
| Symptoms/injuries after inhalation                 | : Inhalation in high concentrations may cause headache. Aspiration of this material into the lungs may cause chemical pneumonia or death. |
| Symptoms/injuries after skin contact               | : Contact may cause irritation.   |
| Symptoms/injuries after eye contact                | : Direct contact with the eyes is likely to be irritating. May cause burns and possible corneal damage.                                   |
| Symptoms/injuries after ingestion                  | : Burns to the mouth, esophagus and stomach.  |
| Chronic symptoms                                   | : No data available.  |

## SECTION 12: Ecological information

### 12.1. Toxicity

No additional information available

### 12.2. Persistence and degradability

No additional information available

### 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. Do not allow the product to be released into the environment.                             |

## SECTION 14: Transport information

|                                |                     |
|--------------------------------|---------------------|
| In accordance with DOT         |                     |
| Transport document description | : Cleaning Compound |

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Department of Transportation (DOT) Hazard Classes : Not Regulated

## Transport by sea

No additional information available

## Air transport

No additional information available

In accordance with ADR / RID / IMDG / IATA / ADN

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### Sentinel 315 Smoke & Soot Cleaner/Wash

All chemical substances in this product are listed in the EPA (Environmental Protection Agency) TSCA (Toxic Substances Control Act) Inventory

SARA Section 311/312 Hazard Classes : Immediate (acute) health hazard

#### Trisodium Phosphate Anhydrous (7601-54-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### Sodium Metasilicate Pentahydrate (6834-92-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### 2-(2-butoxyethoxy)ethanol (112-34-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### Surfactant Blend (Proprietary)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

### 15.2. International regulations

#### CANADA

#### Trisodium Phosphate Anhydrous (7601-54-9)

Listed on the Canadian DSL (Domestic Substances List) inventory

#### Sodium Metasilicate Pentahydrate (6834-92-0)

Listed on the Canadian DSL (Domestic Substances List) inventory

#### 2-(2-butoxyethoxy)ethanol (112-34-5)

Listed on the Canadian DSL (Domestic Substances List) inventory

#### Surfactant Blend (Proprietary)

Listed on the Canadian DSL (Domestic Substances List) inventory

No additional information available

### 15.2.2. National regulations

#### Trisodium Phosphate Anhydrous (7601-54-9)

Listed on Inventory of Existing Chemical Substances (IECSC)  
Listed on the AICS (the Australian Inventory of Chemical Substances)  
Listed on the Japanese ENCS (Existing & New Chemicals Substances) inventory.  
Listed on the Korean ECL (Existing Chemical List) inventory.  
Listed on the Philippines CCS (Chemicals & Chemical Substances) inventory.

#### Sodium Metasilicate Pentahydrate (6834-92-0)

Listed on the AICS (the Australian Inventory of Chemical Substances)

#### 2-(2-butoxyethoxy)ethanol (112-34-5)

Listed on Inventory of Existing Chemical Substances (IECSC)  
Listed on the AICS (the Australian Inventory of Chemical Substances)  
Listed on the Japanese ENCS (Existing & New Chemicals Substances) inventory.  
Listed on the Korean ECL (Existing Chemical List) inventory.  
Listed on the Philippines CCS (Chemicals & Chemical Substances) inventory.

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## Surfactant Blend (Proprietary)

Listed on the European Inventory of Existing Chemical Substances (EINECS)  
Listed on Inventory of Existing Chemical Substances (IECSC)  
Listed on the AICS (the Australian Inventory of Chemical Substances)  
Listed on the Korean ECL (Existing Chemical List) inventory.  
Listed on the Philippines CCS (Chemicals & Chemical Substances) inventory.

### 15.3. US State regulations

#### California Proposition 65

This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

## SECTION 16: Other information

Indication of changes : Revision 1.0 – 15 September 2015 - 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.

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

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 :

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.