

## Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

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Printing date 07/06/2015

Reviewed on 07/06/2015

### 1 Identification

- **Product identifier**
- **Trade name:** ArctiClean 2
- **Relevant identified uses of the substance or mixture and uses advised against**  
**Product description:** Surface cleaner-purifier
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
- **Arctic Silver Incorporated**  
**9826 West Legacy Ave.**  
**Visalia, CA 93291 USA**  
**Voice: 559.740.0912 Fax: 559.740.0913**  
**infoas@arcticsilver.com**  
**www.arcticsilver.com**
- **Emergency telephone number:**  
**Rocky Mountain Poison Control**  
**Toll Free: 877-740-5015**  
**Alternate: 303-739-1110**

### 2 Hazard(s) identification

- **Classification of the substance or mixture**



*Skin Irrit. 2 H315 Causes skin irritation.*

*Eye Irrit. 2B H320 Causes eye irritation.*

- **Label elements**
- **GHS label elements**  
*The product is classified and labeled according to the Globally Harmonized System (GHS).*
- **Hazard pictograms**



- **Signal word** *Warning*
- **Hazard statements**  
*Causes skin and eye irritation.*
- **Precautionary statements**  
*Wear protective gloves.*  
*Wash thoroughly after handling.*  
*If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*  
*Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).*  
*If skin irritation occurs: Get medical advice/attention.*  
*If eye irritation persists: Get medical advice/attention.*  
*If on skin: Wash with plenty of water.*  
*Take off contaminated clothing and wash it before reuse.*
- **Unknown acute toxicity:**  
*10 percent of the mixture consists of ingredient(s) of unknown toxicity.*
- **Classification system:** *NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme*  
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· **NFPA ratings (scale 0 - 4)**



Health = 1  
Fire = 0  
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 1  
Fire = 0  
Reactivity = 0

· **Hazard(s) not otherwise classified (HNOC):** None known

### 3 Composition/information on ingredients

CAS: 7732-18-5 RTECS: ZC 0110000	Water, de-ionized	94-97%
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· **Chemical characterization: Mixtures**

· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous Components:**

CAS: 9016-45-9	Nonylphenoxypoly(ethyleneoxy)ethanol ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; STOT SE 3, H335; Eye Irrit. 2B, H320	1-3%
CAS: 34590-94-8 RTECS: JM 1575000	(2-methoxymethylethoxy)propanol Flam. Liq. 4, H227	1-3%

### 4 First-aid measures

· **Description of first aid measures**

· **General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· **After inhalation:**

Consult a doctor for complaints.

In case of unconsciousness, place patient securely on side position for transportation.

· **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

If skin irritation occurs, consult a doctor.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** Immediately call a doctor.

· **Information for doctor:**

· **Most important symptoms and effects, both acute and delayed**

No further relevant information available.

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**Trade name: Arctic Clean 2****· Indication of any immediate medical attention and special treatment needed***No further relevant information available.***5 Fire-fighting measures**

- **Extinguishing media**
- **Suitable extinguishing agents:**  
*CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.*
- **Special hazards arising from the substance or mixture** *No further relevant information available.*
- **Advice for firefighters**
- **Protective equipment:** *No special measures required.*

**6 Accidental release measures**

- **Personal precautions, protective equipment and emergency procedures** *Not required.*
- **Environmental precautions:**  
*Do not allow product to reach sewage system or any water course.  
Inform respective authorities in case of seepage into water course or sewage system.  
Dilute with plenty of water.  
Do not allow to enter sewers/ surface or ground water.*
- **Methods and material for containment and cleaning up:**  
*Absorb with liquid-binding material (ie. sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to section 13.  
Ensure adequate ventilation.*
- **Reference to other sections**  
*See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.*

**7 Handling and storage**

- **Handling:**
- **Precautions for safe handling**  
*Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.*
- **Information about protection against explosions and fires:** *No special measures required.*
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** *No special requirements.*
- **Information about storage in one common storage facility:** *Not required.*
- **Further information about storage conditions:** *Keep receptacle tightly sealed.*
- **Specific end use(s)** *No further relevant information available.*

**8 Exposure controls/personal protection**

- **Additional information about design of technical systems:** *No further data; see section 7.*

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• **Control parameters**

• **Components with occupational exposure limits:**

**34590-94-8 (2-methoxymethylethoxy)propanol**

PEL	Long-term value: 600 mg/m <sup>3</sup> , 100 ppm Skin
REL	Short-term value: 900 mg/m <sup>3</sup> , 150 ppm Long-term value: 600 mg/m <sup>3</sup> , 100 ppm Skin
TLV	Short-term value: 909 mg/m <sup>3</sup> , 150 ppm Long-term value: 606 mg/m <sup>3</sup> , 100 ppm Skin

• **Additional information:** The lists that were valid during the creation of this SDS were used as basis.

• **Exposure controls**

• **Personal protective equipment:**

• **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing and wash before reuse.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

• **Breathing equipment:** Not required.

• **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Select glove material based on penetration times, rates of diffusion and degradation.

• **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

• **Penetration time of glove material**

The exact break-through time has to be determined and observed by the manufacturer of the protective gloves.

• **Eye protection:**



Tightly sealed goggles

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### 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

**Form:** Liquid  
     **Color:** Colorless

· **Odor:** Mild

· **Odor threshold:** Not determined.

· **pH-value @ 20 °C (68 °F):** 7.5

· **Change in condition**

**Melting point/Melting range:** --

**Boiling point/Boiling range:** > 34 °C (> 93 °F)

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** 270 °C (518 °F)

· **Decomposition temperature:** Not determined.

· **Auto igniting:** Product is not self-igniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits:**

**Lower:** 0.0 Vol %

**Upper:** 0.0 Vol %

· **Vapor pressure @ 20 °C (68 °F):** 23 hPa (17 mm Hg)

· **Density @ 20 °C (68 °F):** 1.01 g/cm<sup>3</sup> (8.21 lbs/gal)

· **Relative density** Not determined.

· **Vapor density** Not determined.

· **Evaporation rate** Not determined.

· **Solubility in / Miscibility with**

**Water:** Fully miscible.

· **Partition coefficient (n-octanol/water):** Not determined.

· **Viscosity:**

**Dynamic @ 20 °C (68 °F):** 1 mPas

**Kinematic:** Not determined.

· **Solvent content:**

**Organic solvents:** 2-5 %

**Water:** 94-97 %

**VOC content:** <2 %

**Solids content:** <1 %

· **Other information** No further relevant information available.

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### 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Additional toxicological information:**  
The product shows the following dangers according to internally approved calculation methods for preparations:  
Harmful  
Irritant

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

Substance is not listed.

- **NTP (National Toxicology Program)**

None of the ingredients are listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients are listed.

### 12 Ecological information

- **Toxicity**

- **Aquatic toxicity:**

**9016-45-9 Nonylphenoxypoly(ethyleneoxy)ethanol**

EC50 12.2 mg/kg (daphnia) (48 hours)

- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Harmful to fish

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- **Additional ecological information:**
- **General notes:**  
Do not allow undiluted product or product that has not been neutralized to reach ground water, water course or sewage system.  
Harmful to aquatic organisms
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

### 14 Transport information

· <b>UN-Number</b>	
· <b>DOT, ADR, ADN, IMDG, IATA</b>	Non-Regulated Material
· <b>UN proper shipping name</b>	Not Regulated for Transportation
· <b>DOT, ADR, ADN, IMDG, IATA</b>	Non-Regulated Material
· <b>Transport hazard class(es)</b>	
· <b>DOT, ADR, ADN, IMDG, IATA</b>	
· <b>Class</b>	Non-Regulated Material
· <b>Packing group</b>	
· <b>DOT, ADR, IMDG, IATA</b>	Non-Regulated Material
· <b>Environmental hazards:</b>	Not applicable.
· <b>Special precautions for user</b>	Not applicable.
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>UN "Model Regulation":</b>	-

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### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

- **Section 355 (extremely hazardous substances):**

None of the ingredients are listed.

- **Section 313 (Specific toxic chemical listings):**

None of the ingredients are listed.

- **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

- **Proposition 65**

- **Chemicals known to cause cancer:**

None of the ingredients are listed.

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed.

- **Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

- **Carcinogenic categories**

- **EPA (Environmental Protection Agency)**

None of the ingredients are listed.

- **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients are listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients are listed.

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS07

- **Signal word** Warning

- **Hazard statements**

Causes skin and eye irritation.

- **Precautionary statements**

Wear protective gloves.

Wash thoroughly after handling.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).

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### Trade name: Arctic Clean 2

If skin irritation occurs: Get medical advice/attention.  
 If eye irritation persists: Get medical advice/attention.  
 If on skin: Wash with plenty of water.  
 Take off contaminated clothing and wash it before reuse.

#### • National regulations:

The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.

#### • State Right to Know

CAS: 9016-45-9	Nonylphenoxypoly(ethyleneoxy)ethanol ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; STOT SE 3, H335; Eye Irrit. 2B, H320	1-3%
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CAS: 7732-18-5 RTECS: ZC 0110000	Water, de-ionized	94-97%

All ingredients are listed.

• **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

• **Date of preparation / last revision** 04/16/2015 / 5

#### • Abbreviations and acronyms:

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road  
 ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
 IMDG: International Maritime Code for Dangerous Goods  
 DOT: US Department of Transportation  
 IATA: International Air Transport Association  
 ACGIH: American Conference of Governmental Industrial Hygienists  
 EINECS: European Inventory of Existing Commercial Chemical Substances  
 ELINCS: European List of Notified Chemical Substances  
 CAS: Chemical Abstracts Service (division of the American Chemical Society)  
 NFPA: National Fire Protection Association (USA)  
 HMIS: Hazardous Materials Identification System (USA)  
 VOC: Volatile Organic Compounds (USA, EU)  
 Flam. Liq. 4: Flammable liquids, Hazard Category 4  
 Acute Tox. 4: Acute toxicity, Hazard Category 4  
 Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2  
 Eye Irrit. 2B: Serious eye damage/eye irritation, Hazard Category 2B  
 STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

\* **Data compared to the previous version altered.**