

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : ENDUST (AEROSOL)

Other means of identification : not applicable

Recommended use : Cleaning product

Restrictions on use : Reserved for industrial and professional use.

Product dilution information : Product is sold ready to use.

Company : Ecolab Inc.  
370 N. Wabasha Street  
St. Paul, Minnesota USA 55102  
1-800-352-5326

Emergency telephone : 1-800-328-0026 (US/Canada), 1-651-222-5352 (outside US)

Issuing date : 06/02/2014

**SECTION 2. HAZARDS IDENTIFICATION**
**GHS Classification**

Flammable aerosols : Category 2

Gases under pressure : Compressed gas

Skin sensitization : Category 1

Specific target organ systemic toxicity - single exposure : Category 3 (Central nervous system)

**GHS Label element**

Hazard pictograms : 

Signal Word : Warning

Hazard Statements : Flammable aerosol.  
Contains gas under pressure; may explode if heated.  
May cause an allergic skin reaction.  
May cause drowsiness or dizziness.

Precautionary Statements : **Prevention:**  
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Avoid breathing dust/fume/ gas/ mist/ vapors/ spray. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves. Intentional misuse by deliberate inhalation may be harmful or fatal.

**Response:**  
IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. If skin irritation or rash occurs: Get medical advice/ attention.

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Wash contaminated clothing before reuse.

**Storage:**

Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.

**Disposal:**

Dispose of contents/ container to an approved waste disposal plant.

**Other hazards** : None known.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture : Mixture

Chemical Name	CAS-No.	Concentration (%)
white mineral oil, petroleum distillates (petroleum), hydrotreated light	8042-47-5	30 - 60
Aliphatic hydrocarbons	64742-47-8	10 - 30
terpenes and terpenoids, sweet orange-oil	106-97-8	10 - 30
propane	68647-72-3	5 - 10
	74-98-6	5 - 10

### SECTION 4. FIRST AID MEASURES

In case of eye contact : Rinse with plenty of water.

In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

If swallowed : Rinse mouth. Get medical attention if symptoms occur.

If inhaled : Remove to fresh air. Treat symptomatically. Get medical attention if symptoms occur.

Protection of first-aiders : If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Notes to physician : Treat symptomatically.

**See toxicological information (Section 11)**

### SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : High volume water jet

Specific hazards during fire fighting : Pressurized container: May burst if heated.  
Flammable aerosols

Hazardous combustion products : Decomposition products may include the following materials:  
Carbon oxides  
nitrogen oxides (NOx)  
Sulfur oxides  
Oxides of phosphorus

Special protective equipment : Use personal protective equipment.

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for fire-fighters

Specific extinguishing methods : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.

Environmental precautions : Do not allow contact with soil, surface or ground water.

Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

### SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Do not get in eyes, on skin, or on clothing. Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Use only with adequate ventilation. Contents under pressure. Do not puncture. Wash hands thoroughly after handling.

Conditions for safe storage : Keep in a cool, well-ventilated place. Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.

Storage temperature : 0 °C to 40 °C

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Ingredients with workplace control parameters

Ingredients	CAS-No.	Form of exposure	Permissible concentration	Basis
white mineral oil, petroleum	8042-47-5	TWA (Mist)	5 mg/m <sup>3</sup>	NIOSH REL
		STEL (Mist)	10 mg/m <sup>3</sup>	NIOSH REL
		TWA (Mist)	5 mg/m <sup>3</sup>	OSHA Z1
distillates (petroleum), hydrotreated light	64742-47-8	TWA	500 ppm 2,000 mg/m <sup>3</sup>	OSHA Z1
		TWA	200 mg/m <sup>3</sup>	ACGIH
Aliphatic hydrocarbons	106-97-8	TWA	800 ppm 1,900 mg/m <sup>3</sup>	NIOSH REL
		TWA	1,000 ppm	ACGIH
		TWA	1,000 ppm	ACGIH
propane	74-98-6	TWA	1,000 ppm	ACGIH
		TWA	1,000 ppm 1,800 mg/m <sup>3</sup>	NIOSH REL
		TWA	1,000 ppm 1,800 mg/m <sup>3</sup>	OSHA Z1

Engineering measures : Effective exhaust ventilation system. Maintain air concentrations

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below occupational exposure standards.

#### Personal protective equipment

- Eye protection : No special protective equipment required.
- Hand protection : Wear the following personal protective equipment:  
Standard glove type.  
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
- Skin protection : No special protective equipment required.
- Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Wash face, hands and any exposed skin thoroughly after handling.

#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : aerosol
- Color : white
- Odor : Floral
- pH : not applicable
- Flash point : not applicable, Sustains combustion
- Odor Threshold : no data available
- Melting point/freezing point : no data available
- Initial boiling point and boiling range : < 35 °C
- Evaporation rate : no data available
- Flammability (solid, gas) : no data available
- Upper explosion limit : no data available
- Lower explosion limit : no data available
- Vapor pressure : no data available
- Relative vapor density : no data available
- Relative density : 0.84 - 0.86
- Water solubility : soluble
- Solubility in other solvents : no data available
- Partition coefficient: n-octanol/water : no data available
- Autoignition temperature : no data available
- Thermal decomposition : no data available
- Viscosity, kinematic : no data available
- Explosive properties : no data available
- Oxidizing properties : no data available

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Molecular weight : no data available  
VOC : no data available  
Heat of combustion : 10.65 kJ/g

#### SECTION 10. STABILITY AND REACTIVITY

Chemical stability : Stable under normal conditions.  
Possibility of hazardous reactions : No dangerous reaction known under conditions of normal use.  
Conditions to avoid : None known.  
Incompatible materials : None known.  
Hazardous decomposition products : Decomposition products may include the following materials:  
Carbon oxides  
nitrogen oxides (NOx)  
Sulfur oxides  
Oxides of phosphorus

#### SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Eye contact  
Skin contact

##### Potential Health Effects

Eyes : Health injuries are not known or expected under normal use.  
Skin : May cause allergic skin reaction.  
Ingestion : Health injuries are not known or expected under normal use.  
Inhalation : Inhalation may cause central nervous system effects. Intentional misuse by deliberate inhalation may be harmful or fatal.  
Chronic Exposure : Health injuries are not known or expected under normal use.

##### Experience with human exposure

Eye contact : No symptoms known or expected.  
Skin contact : Redness, Irritation, Allergic reactions  
Ingestion : No symptoms known or expected.  
Inhalation : Dizziness, Drowsiness

##### Toxicity

Acute oral toxicity : no data available  
Acute inhalation toxicity : no data available  
Acute dermal toxicity : no data available

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Skin corrosion/irritation	: no data available
Serious eye damage/eye irritation	: no data available
Respiratory or skin sensitization	: no data available
Carcinogenicity	
IARC	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
NTP	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
Reproductive effects	: no data available
Germ cell mutagenicity	: no data available
Teratogenicity	: no data available
STOT-single exposure	: no data available
STOT-repeated exposure	: no data available
Aspiration toxicity	: no data available

#### Ingredients

Acute oral toxicity	: white mineral oil, petroleum LD50 rat: > 5,000 mg/kg
	distillates (petroleum), hydrotreated light LD50 rat: > 5,000 mg/kg

#### Ingredients

Acute inhalation toxicity	: Aliphatic hydrocarbons 4 h LC50 rat: 280000 ppm
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### SECTION 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

Environmental Effects	: Toxic to aquatic life with long lasting effects.
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#### Product

Toxicity to fish	: no data available
Toxicity to daphnia and other aquatic invertebrates	: no data available
Toxicity to algae	: no data available

#### Ingredients

Toxicity to fish	: white mineral oil, petroleum 96 h LC50 Fish: > 100 mg/l
	distillates (petroleum), hydrotreated light 96 h LC50: > 1,000 mg/l

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Aliphatic hydrocarbons  
96 h LC50 Fish: 22.03 mg/l

### Ingredients

Toxicity to daphnia and other aquatic invertebrates : distillates (petroleum), hydrotreated light  
72 h EC50: > 1,000 mg/l

### Ingredients

Toxicity to algae : distillates (petroleum), hydrotreated light  
48 h EC50: > 1,000 mg/l

### Persistence and degradability

no data available

### Bioaccumulative potential

no data available

### Mobility in soil

no data available

### Other adverse effects

no data available

## SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods : The product should not be allowed to enter drains, water courses or the soil. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

## SECTION 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

### Land transport (DOT)

UN number : 1950  
Description of the goods : Aerosols  
Class : 2.1  
Environmentally hazardous : no

### Sea transport (IMDG/IMO)

UN number : 1950  
Description of the goods : AEROSOLS  
Class : 2.1  
Marine pollutant : no

## SECTION 15. REGULATORY INFORMATION

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#### EPCRA - Emergency Planning and Community Right-to-Know

##### CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

##### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Fire Hazard  
Acute Health Hazard  
Sudden Release of Pressure Hazard

**SARA 302** : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### California Prop 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

#### The ingredients of this product are reported in the following inventories:

**1907/2006 (EU) :**  
not determined

**Switzerland. New notified substances and declared preparations :**  
not determined

**United States TSCA Inventory :**  
On TSCA Inventory

**Canadian Domestic Substances List (DSL) :**  
All components of this product are on the Canadian DSL.

**Australia Inventory of Chemical Substances (AICS) :**  
On the inventory, or in compliance with the inventory

**New Zealand. Inventory of Chemical Substances :**  
On the inventory, or in compliance with the inventory

**Japan. ENCS - Existing and New Chemical Substances Inventory :**  
not determined

**Japan. ISHL - Inventory of Chemical Substances (METI) :**  
not determined

**Korea. Korean Existing Chemicals Inventory (KECI) :**  
On the inventory, or in compliance with the inventory

**Philippines Inventory of Chemicals and Chemical Substances (PICCS) :**  
On the inventory, or in compliance with the inventory

**China. Inventory of Existing Chemical Substances in China (IECSC) :**  
On the inventory, or in compliance with the inventory

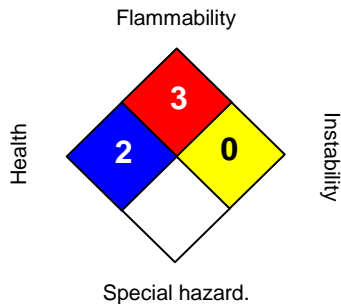


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### SECTION 16. OTHER INFORMATION

#### NFPA:



#### HMIS III:

<b>HEALTH</b>	<b>2*</b>
<b>FLAMMABILITY</b>	<b>3</b>
<b>PHYSICAL HAZARD</b>	<b>2</b>

0 = not significant, 1 = Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

Issuing date : 06/02/2014  
Version : 1.0  
Prepared by : Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.