

ENDUST (AEROSOL)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name

: ENDUST (AEROSOL)

Endust FOR ELECTRONICS

Other means of identification

not applicable

Anti- Static CLeaning and

Dusting SPRAY

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

Gases under pressure

Skin sensitization Specific target organ

systemic toxicity - single

exposure

Category 2

Compressed gas

Category 1

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.

ENDUST (AEROSOL)

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	8042-47-5	30 - 60
distillates (petroleum), hydrotreated light	64742-47-8	10 - 30
Aliphatic hydrocarbons	106-97-8	10 - 30
terpenes and terpenoids, sweet orange-oil	68647-72-3	5 - 10
propane	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.

ENDUST (AEROSOL)

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/m3	NIOSH REL
		STEL (Mist)	10 mg/m3	NIOSH REL
		TWA (Mist)	5 mg/m3	OSHA Z1
distillates (petroleum), hydrotreated light	64742-47-8	TWA	500 ppm 2,000 mg/m3	OSHA Z1
		TWA	200 mg/m3	ACGIH
Aliphatic hydrocarbons	106-97-8	TWA	800 ppm 1,900 mg/m3	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/m3	NIOSH REL
		TWA	1,000 ppm 1,800 mg/m3	OSHA Z1

Engineering measures

: Effective exhaust ventilation system. Maintain air concentrations

ENDUST (AEROSOL)

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

рΗ

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 : no data available

Flammability (solid, gas)

Upper explosion limit

no data available

Lower explosion limit

: no data available

Vapor pressure
Relative vapor density

no data available

Relative density

no data availabi

Water solubility

0.84 - 0.86 soluble

Solubility in other solvents

no data available

Partition coefficient: n-

octanol/water

no data available

Autoignition temperature Thermal decomposition no data availableno data available

Minanaity Limenatia

Viscosity, kinematic

no data available

Explosive properties
Oxidizing properties

no data available

ENDUST (AEROSOL)

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 : Eye contact

exposure

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

ENDUST (AEROSOL)

Skin corrosion/irritation

: no data available

Serious eye damage/eye

: no data available

irritation

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

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Environmental Effects

: Toxic to aquatic life with long lasting effects.

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

ENDUST (AEROSOL)

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 reuse 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

. 2.1

Sea transport (IMDG/IMO)

UN number

1950

Description of the goods

AEROSOLS 2.1

Class

۷.

Marine pollutant

: no

SECTION 15. REGULATORY INFORMATION

ENDUST (AEROSOL)

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

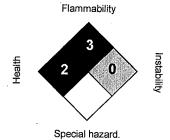
China. Inventory of Existing Chemical Substances in China (IECSC):

On the inventory, or in compliance with the inventory

ENDUST (AEROSOL)

SECTION 16. OTHER INFORMATION

NFPA:



HMIS III:

HEALTH	2*
FLAMMABILITY	3
PHYSICAL HAZARD	2

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.