

EAGLE ONE NANOWAX® LIQUID
WAX
E12081616E

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Ashland	Regulatory Information Number	1-800-325-3751
P.O. Box 2219	Telephone	614-790-3333
Columbus, OH 43216	Emergency telephone	1-800-ASHLAND (1-800-274-5263)

Product name	EAGLE ONE NANOWAX® LIQUID WAX
Product code	E12081616E
Product Use Description	No data

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: liquid,, beige

WARNING! COMBUSTIBLE LIQUID AND VAPOR. MAY AFFECT THE CENTRAL NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. MAY BE HARMFUL IF SWALLOWED. MAY BE HARMFUL IF INHALED OR SWALLOWED. MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY SKIN, CAUSE IRRITATION AND BURNS.

Potential Health Effects

Exposure routes

Inhalation, Skin absorption, Skin contact, Eye Contact, Ingestion

Eye contact

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

Skin contact

Can cause skin irritation. Symptoms may include redness and burning of skin, and other skin damage. Although rare, skin contact with ethylene glycol may cause allergic skin reaction (delayed skin rash which may be followed by blistering, scaling and other skin effects). Additional symptoms of skin contact may include: Blistering Passage

EAGLE ONE NANOWAX® LIQUID
WAX
E12081616E

of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

Ingestion

Swallowing this material may be harmful. Liver, kidney and brain damage in humans has resulted from swallowing lethal or near-lethal amounts of ethylene glycol.

Inhalation

Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.).

Aggravated Medical Condition

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: Skin, lung (for example, asthma-like conditions), Liver, kidney, Exposure to this material may aggravate any preexisting condition sensitive to a decrease in available oxygen, such as chronic lung disease, coronary artery disease or anemias.

Symptoms

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: irritation (nose, throat, airways), Cough, stomach or intestinal upset (nausea, vomiting, diarrhea), Lung irritation, central nervous system excitation (giddiness, liveliness, light-headed feeling) followed by central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness) and other central nervous system effects, involuntary eye movement, cyanosis (causes blue coloring of the skin and nails from lack of oxygen), Lack of coordination, confusion, irregular heartbeat, lung edema (fluid buildup in the lung tissue), acute kidney failure (sudden slowing or stopping of urine production), liver damage, narcosis (dazed or sluggish feeling), Convulsions, coma

Target Organs

Overexposure to this material (or its components) has been suggested as a cause of the following effects in humans: kidney damage, liver damage

Carcinogenicity

This product (or a component) is a petroleum-derived material. Similar materials and certain compounds occurring naturally in petroleum oils have been shown to cause skin cancer in laboratory animals following repeated exposure without washing or

EAGLE ONE NANOWAX® LIQUID
WAX
E12081616E

removal. This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA).

Reproductive hazard

Ethylene glycol has caused birth defects in animal studies at high oral doses. However, it did not cause harm to the pregnant animal or to the fetus when applied to the skin of the pregnant animal.

Other information

This material can form dust which may cause skin or mucous membrane irritation. Symptoms may include redness, burning, and swelling. Although they may cause respiratory tract irritation, nuisance dusts do not form scar tissue or affect the structure of air spaces in the lungs. Their effects on the tissues are potentially reversible.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Concentration
SOLVENT NAPHTHA (PETROLEUM), HEAVY ALIPHATIC	64742-96-7	>=20-<30%
PETROLEUM DISTILLATE WAX	64742-48-9 NJTS# 254504001-5131	>=15-<20% >=10-<15%
ETHYLENE GLYCOL	107-21-1	>=1.5-<5%
ALUMINUM OXIDE (AL2O3)	1344-28-1	>=1.5-<5%
QUATERNARY AMMONIUM MONTMORILLONITE	68953-58-2	>=1.5-<5%
ALUMINUM SILICATE CALCINED	66402-68-4	>=1.5-<5%
TETRAGLYCERYL MONOOLEATE	9007-48-1	>=1-<1.5%

4. FIRST AID MEASURES**Eyes**

EAGLE ONE NANOWAX® LIQUID
WAX
E12081616E

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

Skin

Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

Ingestion

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Notes to physician

Hazards: This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity (See Section 2 - Swallowing) when deciding whether to induce vomiting. Effects of acute ethylene glycol poisoning appear in three fairly distinct stages. The initial stage occurs shortly after exposure, lasts 6-12 hours, and is characterized by central nervous system effects (transient exhilaration, nausea, vomiting, and in severe cases, coma, convulsions, and possible death). The second stage lasts from 12-36 hours after exposure and is initiated by the onset of coma. This phase is characterized by tachypnea, tachycardia, mild hypotension, cyanosis, and in severe cases, pulmonary edema, bronchopneumonia, cardiac enlargement, and congestive failure. The final stage occurs 24-72 post-exposure and is characterized by renal failure, ranging from a mild increase in blood urea nitrogen and creatinine followed by recovery, to complete anuria with acute tubular necrosis that can lead to death. Oxaluria is found in most cases. The most significant laboratory finding in ethylene glycol intoxication is severe metabolic acidosis.

Treatment: This product contains ethylene glycol. Ethanol decreases the metabolism of ethylene glycol to toxic metabolites. Ethanol should be administered as soon as possible in cases of severe poisoning since the elimination half-life of ethylene glycol is 3 hours. If medical care will be delayed several hours, give the patient three to four 1-ounce oral "shots" of 86-proof or higher whiskey before or during transport to the hospital. Fomepizole (4-methylpyrazole) is an effective antagonist of alcohol

EAGLE ONE NANOWAX® LIQUID
WAX
E12081616E

dehydrogenase, and as such, may be used as an antidote in the treatment of ethylene glycol poisoning. Hemodialysis effectively removes ethylene glycol and its metabolites from the body.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Dry chemical, Carbon dioxide (CO₂), regular foam (such as AFFF)

Hazardous combustion products

May form: carbon dioxide and carbon monoxide, Hydrocarbons, Alcohols, Aldehydes, ethers, toxic fumes

Precautions for fire-fighting

Material is volatile and readily gives off vapors which may travel along the ground or be moved by ventilation and ignited by pilot lights, flames, sparks, heaters, smoking, electric motors, static discharge or other ignition sources at locations near the material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning liquid with water used for cooling purposes.

Flammability Class for Flammable Liquids

Combustible Liquid Class II

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

For personal protection see section 8. Eliminate all sources of ignition such as flares, flames (including pilot lights), and electrical sparks. Persons not wearing proper personal protective equipment should be excluded from area of spill. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks).

Environmental precautions

EAGLE ONE NANOWAX® LIQUID
WAX
E12081616E

Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred.

Methods for cleaning up

Absorb liquid on vermiculite, floor absorbent or other absorbent material.

7. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Avoid prolonged or frequently repeated skin contact with this material. Skin contact can be minimized by wearing impervious protective gloves. As with all products of this nature, good personal hygiene is essential. Hands and other exposed areas should be washed thoroughly with soap and water after contact, especially before eating and/or smoking. Regular laundering of contaminated clothing is essential to reduce indirect skin contact with this material. Handling equipment must be properly grounded.

Storage

Do not store near extreme heat, open flame, or sources of ignition.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

ETHYLENE GLYCOL		107-21-1	
ACGIH	Ceiling Limit Value:	100 mg/m3	Aerosol.
ALUMINUM OXIDE (AL2O3)		1344-28-1	
ACGIH	time weighted average	10 mg/m3	
OSHA Z1	Permissible exposure limit	5 mg/m3	Respirable fraction.
OSHA Z1	Permissible exposure limit	15 mg/m3	Total dust.
OSHA Z1A	time weighted average	5 mg/m3	Respirable fraction.
OSHA Z1A	time weighted average	10 mg/m3	Total dust.
US CA OEL	Time Weighted Average (TWA)	5 mg/m3	Respirable fraction.
	Permissible Exposure Limit (PEL):		
US CA OEL	Time Weighted Average (TWA)	10 mg/m3	Total dust.
	Permissible Exposure Limit (PEL):		

General advice

EAGLE ONE NANOWAX® LIQUID
WAX
E12081616E

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Exposure controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Eye protection

Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist.

Skin and body protection

Not normally required. However, wear resistant gloves such as nitrile rubber to prevent irritation which may result from prolonged or repeated skin contact with product. Wear normal work clothing including long pants, long-sleeved shirts and foot covering to prevent direct contact of the product with the skin. Launder clothing before reuse. If skin irritation develops, contact your facility health and safety professional or your local safety equipment supplier to determine the proper personal protective equipment for your use.

Respiratory protection

A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	liquid
Form	No data
Colour	beige

EAGLE ONE NANOWAX® LIQUID
WAX
E12081616E

Odour	fruity
Boiling point/boiling range	77.00 °C / 171 °F @ 760.00 mmHg
pH	No data
Flash point	115 °F / 46 °C, Tag closed cup
Evaporation rate	< 1 (Ethyl Ether)
Explosion limits	0.7 %(V) 7.0 %(V)
Vapour pressure	2.00 mmHg @ 68 °F / 20 °C
Vapour density	(>) 1 (AIR=1)
Density	0.907 g/cm ³
Solubility	partly soluble in water
Partition coefficient: n-octanol/water	No data
log Pow	no data available
Autoignition temperature	No data

10. STABILITY AND REACTIVITY

Stability

Stable.

Conditions to avoid

Heat, flames and sparks.

Incompatible products

Avoid contact with:, Strong oxidizing agents, Alkaline earth metals, Alkali metals, Strong acids, strong alkalis, Sulphur compounds, Acids, chlorinated rubber, chlorine trifluoride, Ethylene oxide

Hazardous decomposition products

May form:, carbon dioxide and carbon monoxide, Hydrocarbons

Hazardous reactions

Product will not undergo hazardous polymerization.

Thermal decomposition

No data

EAGLE ONE NANOWAX® LIQUID
WAX
E12081616E

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity

SOLVENT NAPHTHA (PETROLEUM), HEAVY ALIPHATIC	LD 50 Rat: > 5 g/kg
PETROLEUM DISTILLATE	LD 50 Rat: > 5,000 mg/kg
WAX	no data available
ETHYLENE GLYCOL	LD 50 Rat: 6,140 mg/kg
ALUMINUM OXIDE (AL2O3)	no data available
QUATERNARY AMMONIUM MONTMORILLONITE	LD 50 Rat: > 8 g/kg
ALUMINUM SILICATE CALCINED	no data available
TETRAGLYCERYL MONOOLEATE	no data available

Acute inhalation toxicity

SOLVENT NAPHTHA (PETROLEUM), HEAVY ALIPHATIC	LC 50 Rat: > 5 mg/l , 4 h
PETROLEUM DISTILLATE	no data available
WAX	no data available
ETHYLENE GLYCOL	no data available
ALUMINUM OXIDE (AL2O3)	no data available
QUATERNARY AMMONIUM MONTMORILLONITE	no data available
ALUMINUM SILICATE CALCINED	no data available
TETRAGLYCERYL MONOOLEATE	no data available

Acute dermal toxicity

SOLVENT NAPHTHA (PETROLEUM), HEAVY ALIPHATIC	LD 50 Rat: > 2,000 mg/kg
PETROLEUM DISTILLATE	LD 50 Rabbit: > 3,000 mg/kg
WAX	no data available
ETHYLENE GLYCOL	LD 50 Rabbit: 9,530 mg/kg
ALUMINUM OXIDE (AL2O3)	no data available
QUATERNARY AMMONIUM MONTMORILLONITE	no data available
ALUMINUM SILICATE CALCINED	no data available
TETRAGLYCERYL MONOOLEATE	no data available

12. ECOLOGICAL INFORMATION

Aquatic toxicity

EAGLE ONE NANOWAX® LIQUID
WAX
E12081616E

Acute and Prolonged Toxicity to Fish

No data

Acute Toxicity to Aquatic Invertebrates

No data

Environmental fate and pathways

No data

13. DISPOSAL CONSIDERATIONS

Waste disposal methods

Dispose of in accordance with all applicable local, state and federal regulations. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Ashland Distribution's Environmental Services Group at 800-637-7922.

14. TRANSPORT INFORMATION

IMDG:

UN1993, FLAMMABLE LIQUID, N.O.S. (PETROLEUM DISTILLATES,) 3, III

IATA_P:

UN1993, Flammable liquid, n.o.s. (PETROLEUM DISTILLATES,) 3, III

IATA_C:

UN1993, Flammable liquid, n.o.s. (PETROLEUM DISTILLATES,) 3, III

CFR_ROAD:

UN1993, Flammable liquids, n.o.s. (PETROLEUM DISTILLATES,) 3, III

CFR_RAIL:

UN1993, Flammable liquids, n.o.s. (PETROLEUM DISTILLATES,) 3, III

CFR_INWTR:

UN1993, Flammable liquids, n.o.s. (PETROLEUM DISTILLATES,) 3, III

IMDG_ROAD:

UN1993, FLAMMABLE LIQUID, N.O.S. (PETROLEUM DISTILLATES,) 3, III

IMDG_RAIL:

UN1993, FLAMMABLE LIQUID, N.O.S. (PETROLEUM DISTILLATES,) 3, III

EAGLE ONE NANOWAX® LIQUID
WAX
E12081616E

QUATERNARY AMMONIUM	68953-58-2	none
MONTMORILLONITE		
ALUMINUM SILICATE CALCINED	66402-68-4	none
TETRAGLYCERYL MONOOLEATE	9007-48-1	none

	Health	Flammability	Reactivity	Other
HMIS	1	2	0	
NFPA	1	2	0	

16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).