

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : APOLLO 46 FRH

Other means of identification : Not applicable

Recommended use : Lubricant

Restrictions on use : Reserved for industrial and professional use.

Product dilution information : Product is sold ready to use.

Company : Ecolab Inc.
1 Ecolab Place
St. Paul, Minnesota USA 55102
1-800-352-5326

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

Issuing date : 03/23/2017

SECTION 2. HAZARDS IDENTIFICATION
GHS Classification

Acute toxicity (Inhalation) : Category 4
Eye irritation : Category 2B

GHS label elements

Hazard pictograms :



Signal Word : Warning

Hazard Statements : Causes eye irritation.
Harmful if inhaled.

Precautionary Statements : **Prevention:**
Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. Wash skin thoroughly after handling. Use only outdoors or in a well-ventilated area.
Response:
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention.

Other hazards : None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture : Mixture

Chemical name	CAS-No.	Concentration (%)
---------------	---------	-------------------

SAFETY DATA SHEET

APOLLO 46 FRH

2-ethyl-2-[[[(1-oxoooleyl)oxy]methyl]-1,3-propanediyl
dioleate

57675-44-2

60 - 100

SECTION 4. FIRST AID MEASURES

- In case of eye contact : Rinse with plenty of water.
- In case of skin contact : Rinse with plenty of water.
- If swallowed : Rinse mouth. Get medical attention if symptoms occur.
- If inhaled : Remove to fresh air. Treat symptomatically. Get medical attention.
- Protection of first-aiders : If potential for exposure exists refer to Section 8 for specific personal protective equipment.
- Notes to physician : Treat symptomatically.
- Most important symptoms and effects, both acute and delayed : See Section 11 for more detailed information on health effects and symptoms.

SECTION 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : None known.
- Specific hazards during fire fighting : Not flammable or combustible.
- Hazardous combustion products : Decomposition products may include the following materials:
Carbon oxides
Nitrogen oxides (NOx)
Sulfur oxides
Oxides of phosphorus
- Special protective equipment for fire-fighters : Use personal protective equipment.
- 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). For large spills, dike

SAFETY DATA SHEET

APOLLO 46 FRH

spilled material or otherwise contain material to ensure runoff does not reach a waterway. Do not flush into surface water or sanitary sewer system.

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Use only with adequate ventilation. Wash hands thoroughly after handling.
- Conditions for safe storage : Keep out of reach of children. Store in suitable labeled containers.
- Storage temperature : 0 °C to 50 °C

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

- Engineering measures : Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

Personal protective equipment

- Eye protection : No special protective equipment required.
- Hand protection : No special protective equipment required.
- 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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : liquid
- Color : amber
- Odor : hydrocarbon-like
- pH : Not applicable
- Flash point : 288 °C open cup, Sustains combustion
- Odor Threshold : No data available
- Melting point/freezing point : No data available
- Initial boiling point and boiling range : No data available
- 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

SAFETY DATA SHEET

APOLLO 46 FRH

Relative vapor density	: No data available
Relative density	: 0.914
Water solubility	: insoluble
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
Molecular weight	: No data available
VOC	: No data available

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	: Acids Bases
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 : Inhalation, Eye contact, Skin contact

Potential Health Effects

Eyes	: Causes eye irritation.
Skin	: Health injuries are not known or expected under normal use.
Ingestion	: Health injuries are not known or expected under normal use.
Inhalation	: Harmful if inhaled.
Chronic Exposure	: Health injuries are not known or expected under normal use.

Experience with human exposure

Eye contact : Redness, Irritation

SAFETY DATA SHEET

APOLLO 46 FRH

Skin contact : No symptoms known or expected.

Ingestion : No symptoms known or expected.

Inhalation : No information available.

Toxicity

Product

Acute oral toxicity : Acute toxicity estimate : 4,843 mg/kg

Acute inhalation toxicity : 4 h Acute toxicity estimate : 11.11 mg/l

Acute dermal toxicity : Acute toxicity estimate : 2,525 mg/kg

Skin corrosion/irritation : No data available

Serious eye damage/eye irritation : Mild eye irritation

Respiratory or skin sensitization : No data available

Carcinogenicity : No data available

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

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Environmental Effects : Very toxic to aquatic life. 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 : 2-ethyl-2-[[[(1-oxooleyl)oxy]methyl]-1,3-propanediyl dioleate
96 h LL50 Oncorhynchus mykiss (rainbow trout): 79 mg/l
Test substance: Information given is based on data obtained from similar substances.

Ingredients

Toxicity to daphnia and other aquatic invertebrates : 2-ethyl-2-[[[(1-oxooleyl)oxy]methyl]-1,3-propanediyl dioleate
48 h EL50 Daphnia magna (Water flea): 0.22 mg/l
Test substance: Information given is based on data obtained from similar substances.

Ingredients

Toxicity to algae : 2-ethyl-2-[[[(1-oxooleyl)oxy]methyl]-1,3-propanediyl dioleate

SAFETY DATA SHEET

APOLLO 46 FRH

72 h EL50 *Pseudokirchneriella subcapitata* (green algae): 0.32 mg/l
Test substance: Information given is based on data obtained from similar substances.

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 : Do not contaminate ponds, waterways or ditches with chemical or used container. 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. Dispose of in accordance with local, state, and federal regulations.

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)

Not dangerous goods

Sea transport (IMDG/IMO)

Not dangerous goods

SECTION 15. REGULATORY INFORMATION

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 : Acute Health Hazard

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

SAFETY DATA SHEET

APOLLO 46 FRH

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:

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 :

On the inventory, or in compliance with the inventory

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) :

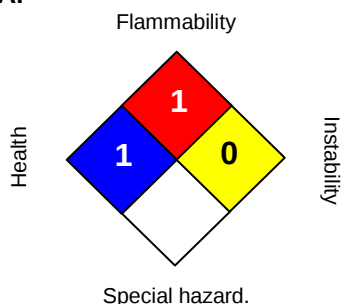
On the inventory, or in compliance with the inventory

Taiwan Chemical Substance Inventory :

On the inventory, or in compliance with the inventory

SECTION 16. OTHER INFORMATION

NFPA:



HMIS III:

HEALTH	1
FLAMMABILITY	1
PHYSICAL HAZARD	0

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

Issuing date : 03/23/2017
Version : 1.0
Prepared by : Regulatory Affairs

SAFETY DATA SHEET

APOLLO 46 FRH

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.