

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION

Product identifier

Product Name Feroclean LE 643 K

Other means of identification

UN/ID no UN 1268 (bulk)

Recommended use of the chemical and restrictions on use

Recommended Use Water soluble cleaning fluid.

Uses advised against No information available

Details of the supplier of the safety data sheet

Manufacturer Address

Yushiro Manufacturing America, Inc.
783 West Mausoleum Road
Shelbyville, IN 46176
Telephone: 317-398-9862

Emergency telephone number

Emergency Telephone Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Aspiration toxicity	Category 1
Flammable liquids	Category 4

Label elements

Emergency Overview

Danger

Hazard statements

May be fatal if swallowed and enters airways
Combustible liquid



Appearance No information available

Physical state liquid

Odor Petroleum distillates

Precautionary Statements - Prevention

Keep away from flames and hot surfaces. - No smoking

Wear protective gloves/eye protection/face protection

Precautionary Statements - Response

IF SWALLOWED: Immediately call a POISON CENTER or doctor
 Do NOT induce vomiting
 In case of fire: Use CO2, dry chemical, or foam to extinguish

Precautionary Statements - Storage

Store locked up
 Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other Information

- May be harmful if swallowed
- May be harmful in contact with skin
- Causes mild skin irritation

Unknown acute toxicity 4.275 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Chemical Name	CAS No	weight-%	Trade Secret
Distillates (petroleum), hydrotreated light	Trade Secret	60 - 100	*
2-(2-butoxyethoxy)ethanol	112-34-5	1 - 5	*

Some specific chemical identities and the exact percentages of composition have been withheld as trade secrets.

4. FIRST AID MEASURES

First aid measures

- Eye contact** Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
- Skin Contact** Wash skin with soap and water.
- Inhalation** Remove to fresh air. If symptoms persist, call a physician.
- Ingestion** Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Dry chemical, foam, carbon dioxide, water spray or fog is recommended.

Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

No information available.

Hazardous combustion products Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentration.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Ensure adequate ventilation, especially in confined areas.

Environmental precautions

Environmental precautions Avoid release to the environment. Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Soak up with inert absorbent material.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Ensure adequate ventilation, especially in confined areas.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Protect from elevated temperatures and direct sunlight. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).

Incompatible materials Acids. Strong oxidizing agents. Nitrites and nitrosating agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines Distillates (petroleum), hydrotreated light: ACGIH TLV (RCP - hydrocarbon solvent vapor) - 1,200 mg/m³.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
2-(2-butoxyethoxy)ethanol 112-34-5	TWA: 10 ppm inhalable fraction and vapor	-	-

Appropriate engineering controls

Engineering Controls Showers
 Eyewash stations
 Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Avoid contact with eyes. Wear safety glasses with side shields (or goggles).

Skin and body protection Avoid contact with skin and clothing. Wear suitable protective clothing. Selection of protective clothing depends on work conditions.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	liquid	Odor	Petroleum distillates
Appearance	No information available	Odor threshold	No information available
Color	light yellow		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	
Melting point / freezing point	No information available	
Boiling point / boiling range	No information available	
Flash point	67 °C	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Relative density	0.814	@ 20°C
Water solubility	Miscible in water	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	approx. 3 mm ² /s	@ 40° C
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	6.5 lbs/gal
Bulk density	No information available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid

Protect from elevated temperatures and direct sunlight. Heat, flames and sparks.

Incompatible materials

Acids. Strong oxidizing agents. Nitrites and nitrosating agents.

Hazardous Decomposition Products

No hazardous decomposition products if stored and handled under normal conditions.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	No data available
Inhalation	May cause irritation of respiratory tract. May cause drowsiness or dizziness.
Eye contact	May cause slight irritation.
Skin Contact	Repeated or prolonged skin contact may result in dermatitis.
Ingestion	May be harmful if swallowed.

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	Repeated exposure may cause skin dryness or cracking.
Sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	This product does not contain any components at concentrations at or above 0.1% that are listed as carcinogens or potential carcinogens by OSHA, IARC or NTP.
Reproductive toxicity	No information available.
STOT - single exposure	Respiratory irritation.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

Numerical measures of toxicity - Product Information

Unknown acute toxicity 4.275 % of the mixture consists of ingredient(s) of unknown toxicity
The following values are calculated based on chapter 3.1 of the GHS document .
ATEmix (oral) >5,000 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life

4.275 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging

Do not reuse container.

14. TRANSPORT INFORMATION

DOT

UN/ID no

Proper shipping name

Hazard Class

Packing Group

Not regulated (If shipped in NON BULK packaging by ground transport)

UN 1268 (bulk)

Petroleum distillates, N.O.S.

Combustible liquid

III

IATA

Not regulated

IMDG

Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA

Complies

DSL/NDSL

Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
2-(2-butoxyethoxy)ethanol - 112-34-5	1.0

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product contains substances classified as oil under Section 311 of the Clean Water Act and the Oil Pollution Act of 1990. Discharge or spills which produce a visible sheen on surface water or waterways leading to surface water must be reported to the National Response Center at 800-424-8802.

CERCLA

Contains no substances that would reasonably be expected to attain reportable quantity (RQ) thresholds.

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals

U.S. EPA Label information

EPA Pesticide registration number Not Applicable

16. OTHER INFORMATION

Issue Date 29-Mar-2017

Revision Date: 17-Jun-2019

Revision Note

No information available

Disclaimer

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.

End of Safety Data Sheet