

SAFETY DATA SHEET

1. Product and company identification

Name of chemical (Product name): EMULGEN LS-110

Product No.: B0002015

Manufacturer/Importer/Distributor Information

Information on domestic manufacturer

Company Name: Kao Corporation
Address: 1-3, Bunka 2-chome, Sumida-ku, Tokyo 131-8501 Japan
Telephone: +81-3-5630-7700
Fax: +81-3-5630-7889
Contact division: Chemical Business
E-mail: chemical@kao.co.jp

Intended Use: Water treatment chemicals, Washing and cleaning products for industrial use, Washing and cleaning agents for household use and institutional use

Restrictions on use: Please refer to Sec.2, 4, 7, 8, 10 and 13.

Emergency telephone number: 81-3-5630-7700

2. Hazard(s) identification

GHS classification

Health Hazards

Serious Eye Damage/Eye Irritation Category 1

Unknown toxicity - Health

Acute toxicity, inhalation, dust or mist 100 %

Environmental Hazards

Acute hazards to the aquatic environment Category 2

Unknown toxicity - Environment

Acute hazards to the aquatic environment 0 %

Chronic hazards to the aquatic environment 0 %

Label Elements

Pictograms:



Signal Word:	Danger
Hazard Statement:	Causes serious eye damage. Toxic to aquatic life.
Precautionary Statements	
Prevention:	Wash thoroughly after handling. Wear eye protection/face protection. Avoid release to the environment. This product may form partially precipitate according to the storage condition. In that case, please warm-up for dissolving, then use as homogeneous liquid.
Response:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. IF ON SKIN: Wash with plenty of soap and water.
Storage:	-
Disposal:	Passed to a licensed waste contractor.
Other hazards which do not result in GHS classification:	None.

3. Composition/information on ingredients

Substances

Chemical name or generic name	CAS number	ISHL	ENCS	Content in percent (%)
Polyoxyethylene polyoxypropylene alkyl ethers	68439-51-0	(7)-97	(7)-97	

4. First-aid measures

Description of first aid measures

Inhalation:	Remove person to fresh air and keep comfortable for breathing.
Skin Contact:	Gently wash with plenty of soap and water.
Eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
Ingestion:	Immediately call a POISON CENTER/doctor.
Personal Protection for First-aid Responders:	No data available.

Most important symptoms and effects, both acute and delayed

Symptoms: No data available.

Hazards: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: Get medical attention if symptoms occur.

5. Fire-fighting measures

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Powder, alcohol-resistant foam, water spray, carbon dioxide, sand

Unsuitable extinguishing media: No data available.

Special hazards arising from the substance or mixture: No data available.

Special protective equipment and precautions for fire-fighters

Special fire-fighting procedures: Keep away from sources of ignition and use appropriate extinguishing media. Fight fire from upwind position if possible. Do not flow the materials causing adverse effects into the environment with effluent fire extinguishing agents.

Special protective equipment for fire-fighters: Use goggles in combination with dust mask, and other protections as appropriate to situation.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Use goggles and protective gloves. Large spills : Remove person to safety. Ensure adequate ventilation.

Methods and material for containment and cleaning up: Small spills: Absorb spills with sand, inert absorbent, waste cloth or sawdust. Then wipe up remainder in waste cloth. Large spills: Dike spills and dispose of in safe area.

Environmental Precautions: Avoid release to the environment.

Prevention of secondary hazards: Keep away from sources of ignition and prepare extinguishing media.

7. Handling and storage

Handling

Technical measures: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Local/Total ventilation:	Use an adequate ventilation.
Safe handling advice:	Keep away from source of ignition. Avoid contact with eyes. Use an adequate ventilation. Wash thoroughly after handling. Use personal protective equipment as required. This product may form partially precipitate according to the storage condition. In that case, please warm-up for dissolving, then use as homogeneous liquid.
Contact avoidance measures:	No data available.

Storage

Safe storage conditions:	Keep container tightly closed. Store in a well-ventilated place. Keep away from source of ignition.
Safe packaging materials:	No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Product:	None known.
-----------------	-------------

Individual protection measures, such as personal protective equipment

Eye/face protection:	Safety goggles
Hand Protection:	Material: Rubber gloves
Skin and Body Protection:	Full-body suit
Respiratory Protection:	Use as appropriate to situation.
Hygiene measures:	No data available.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Physical state:	Liquid
Form:	Liquid
Color:	Colorless to pale yellow
Odor:	Slight characteristic odor
Odor Threshold:	No data available.
Freezing point:	1 °C/34 °F

Boiling Point:	No data available.
Flammability:	No data available.
Upper/lower limit on flammability or explosive limits	
Explosive limit - upper:	No data available.
Explosive limit - lower:	No data available.
Flash Point:	242 °C/468 °F (Cleveland open cup)
Auto-ignition temperature:	No data available.
Decomposition Temperature:	No data available.
pH:	6 (5% solution)
Viscosity	
Dynamic viscosity:	99 mPa.s (20 °C/68 °F)
Kinematic viscosity:	No data available.
Flow Time:	No data available.
Solubility(ies)	
Solubility in Water:	Very Soluble
Solubility (other):	Soluble in acetone, chloroform, cyclohexane, ethanol, 2-propanol and toluene
Partition coefficient (n-octanol/water):	No data available.
Vapor pressure:	No data available.
Relative density:	No data available.
Density:	1.012 g/ml (20 °C/68 °F)
Relative vapor density:	No data available.
Particle characteristics	
Particle Size:	No data available.
Particle Size Distribution:	No data available.

10. Stability and reactivity

Reactivity:	No data available.
Chemical Stability:	Stable in general.
Possibility of hazardous reactions:	Material is stable under normal conditions.
Conditions to avoid:	No data available.
Incompatible Materials:	No data available.
Hazardous Decomposition Products:	No special hazardous and harmful combustion or decomposition.

11. Toxicological information

Acute toxicity (list all possible routes of exposure)

Oral

Product: LD 50 (Rat, Male): > 2,000 mg/kg
Not classified based on available data.

Dermal

Product: No data available.
Not classified based on available data of component(s).

Inhalation

Product: Dust and mist: Classification not possible due to insufficient data.
Vapour: No data available.
Not classified based on available data of component(s).

Skin Corrosion/Irritation

Product: OECD TG404 (Rabbit, 4 h): Non irritant undiluted
Not classified based on available data.

Serious Eye Damage/Eye Irritation

Product: OECD TG405 Rabbit: Severe undiluted

Respiratory or Skin Sensitization

Product: Skin sensitization, GPMT Skin: (Guinea Pig): Negative (Data on similar product)
Skin sensitization, Buehler Skin: (Guinea Pig): Negative
Skin: Not classified based on available data.
Respiratory: Classification not possible due to insufficient data.

Carcinogenicity

Product: Classification not possible due to insufficient data.

IARC:

No carcinogenic components identified

ACGIH:

No carcinogens present or none present in regulated quantities

NTP:

No carcinogenic components identified

JSOH:

No carcinogenic components identified

EU

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: Ames test (TA98, TA100): Negative
Classification not possible due to insufficient data.

In vivo

Product: Classification not possible due to insufficient data.

Reproductive toxicity

Product: Classification not possible due to insufficient data.

Specific Target Organ Toxicity - Single Exposure

Product: Classification not possible due to insufficient data.

Specific Target Organ Toxicity - Repeated Exposure

Product: Classification not possible due to insufficient data.

Aspiration Hazard

Product: Classification not possible due to insufficient data.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: LC 50 (Red Killifish, 96 h): 4.0 mg/l

Aquatic Invertebrates

Product: EC 50 (Daphnia, 48 h): 1.58 mg/l

Toxicity to Aquatic Plants

Product: No data available.

Chronic hazards to the aquatic environment:

Fish

Product: No data available.
Not classified based on available data of component(s).

Aquatic Invertebrates

Product: No data available.
Not classified based on available data of component(s).

Persistence and Degradability:

Biodegradation

Product: 80 % (28 d, OECD TG301B) Readily biodegradable
87 - 89 % (14 d, OECD TG301C) Readily biodegradable

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log K_{ow})

Product: No data available.

Mobility in soil: No data available.

Hazardous to the ozone layer: Not Regulated

Further Information: No data available.

13. Disposal considerations

Disposal methods: Review "HANDLING AND STORAGE (Section 7)". Passed to a licensed waste contractor.

Contaminated Packaging: No data available.

14. Transport information

International regulations

IMDG

Not Regulated.

IATA

Not Regulated.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations

Domestic Standard: In compliance with domestic law.

15. Regulatory information

Industrial Safety and Health Law

Specified Substances Regulation

Class 1 designated chemical substances:

Not Regulated

Class 2 designated chemical substances:

Not Regulated

Class 3 designated chemical substances:
Not Regulated

Ordinance on Prevention of Lead Poisoning:
Not Regulated

Ordinance on Prevention of Tetraalkyl Lead Poisoning:
Not Regulated

Notifiable substances (wt% is sometimes described by range because it's CBI.):
Poly(oxyethylene) alkyl ether (limited to those the alkyl group is C=12-15 and mixture thereof) (From April 1st, 2025) 1.0 - 10%

Labeling substances:
Poly(oxyethylene) alkyl ether (limited to those the alkyl group is C=12-15 and mixture thereof) (From April 1st, 2025)

Confirmed mutagens among the notified chemical substances:
Not Regulated

Confirmed mutagens among the existing chemical substances:
Not Regulated

Confirmed carcinogenic chemical substances:
Not Regulated

Poisonous and Deleterious Substances Control Act
Not Regulated

Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.

Class I specified chemical substances:
Not Regulated

Class II specified chemical substances:
Not Regulated

Monitoring chemical substances:
Not Regulated

Priority Assessment Chemical Substances (PACs):
α-(Alkyl(C=6-18))-ω-hydroxypoly[oxyethane-1,2-diyl/oxy(methylethane-1,2-diyl)](Limited to polymers with an average molecular weight of less than 1,000.)
alpha-Alkyl(C=12-15)-omega-hydroxypoly(oxyethylene) (It is limited that a number-average molecular weight of the polymer is less than 1,000.)

Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof

Class 1 Substance(s):
POLY(OXYETHYLENE)ALKYL ETHER (ALKYL C=12-15) 2.1%

Fire Service Act:
Group 4: Flammable liquids, Type 4 petroleum, Water soluble liquid, Designated Quantity (6000 litre)
Hazardous rank III

Ship Safety Law, Dangerous Goods Marine Transport and Storage Rule:
Not Regulated

Air Law, Enforcement Rule:
Not Regulated

Explosives Control Act:
Not Regulated

High Pressure Gas Safety Act:
Not Regulated

Export Trade Control Order:
Not Regulated

Inventory Status:

US TSCA Inventory:	On or in compliance with the inventory
Canada DSL Inventory List:	On or in compliance with the inventory
Australia Industrial Chem. Act (AIC):	On or in compliance with the inventory
Korea Existing Chemicals Inv. (KECI):	Contact us for information
Japan (ENCS) List:	On or in compliance with the inventory
Japan ISHL Listing:	On or in compliance with the inventory
Philippines PICCS:	On or in compliance with the inventory
China Inv. Existing Chemical Substances:	On or in compliance with the inventory
REACH (EU):	Registered
Taiwan Chemical Substance Inventory:	On or in compliance with the inventory

16. Other Information

Disclaimer: To the best of the manufacturer's knowledge, the information contained herein is accurate. However, neither the manufacturer, nor any of its affiliates, make any representations or warranties (expressed or implied), nor assumes any liability (including liability for any direct, incidental, consequential, or other damages) with respect to the accuracy or completeness of the information contained herein. Such information may be (without limitation) invalid if the specified material is used in combination with another, in a particular process, or under unusual conditions. Determination of suitability of any material for any given purpose is the sole responsibility of the user who assumes all risk and responsibility therefore. All materials may present unknown hazards and should be used with appropriate caution. The manufacturer cannot and does not guarantee that the hazards described herein are the only ones that exist. In the case of the product for fragrance, it's in accordance with the latest standard of IFRA within ordinary use. Contact with the supplier for detail information.

Issue Date: 2021.01.06

Revision Date: 2025.01.10

Version #: 7.0

Reference:

- Hazard communication of chemicals based on GHS -- Labelling and Safety Data Sheet (SDS) (JIS Z 7253 : 2019)
- International Chemical Safety Cards(ICSC) (Compiler's Guide)(1994)
- GHS guideline -- Labelling and Safety Data Sheet (2019) Japan Chemical Industry Association
- (99): Internal study data