

# SAFETY DATA SHEET

## 1. Product and company identification

**Name of chemical (Product name):** EMULGEN LS-106

**Product No.:** B0002013

### 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:** Additives for plastic products, Washing and cleaning products for industrial 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
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#### Unknown toxicity - Health

Acute toxicity, inhalation, dust or mist	100 %
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#### Environmental Hazards

Acute hazards to the aquatic environment	Category 2
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Chronic hazards to the aquatic environment	Category 2
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#### Unknown toxicity - Environment

Acute hazards to the aquatic environment	0 %
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Chronic hazards to the aquatic environment	0 %
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### Label Elements

#### Pictograms:



**Signal Word:**

Danger

**Hazard Statement:**

Causes serious eye damage.  
Toxic to aquatic life with long lasting effects.

**Precautionary Statements**

**Prevention:**

Avoid release to the environment. Wash thoroughly after handling. Wear eye protection/face protection. This product may be solidified totally or partially according to the storage condition. In that case, please warm-up for melting, then use at 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. Collect spillage.

**Storage:**

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**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

<b>Technical measures:</b>	Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
<b>Local/Total ventilation:</b>	Use an adequate ventilation.
<b>Safe handling advice:</b>	Keep away from source of ignition. Avoid contact with eyes. This product may be solidified totally or partially according to the storage condition. In that case, please warm-up for melting, then use at homogeneous liquid. Use an adequate ventilation. Wash thoroughly after handling. Use personal protective equipment as required.
<b>Contact avoidance measures:</b>	No data available.

### Storage

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

## 8. Exposure controls/personal protection

### Control Parameters

#### Occupational Exposure Limits

<b>Product:</b>	None known.
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### Individual protection measures, such as personal protective equipment

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

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

#### Appearance

<b>Physical state:</b>	Liquid
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<b>Form:</b>	Liquid
<b>Color:</b>	Colorless to pale yellow
<b>Odor:</b>	Slight characteristic odor
<b>Odor Threshold:</b>	No data available.
<b>Freezing point:</b>	-9 °C/16 °F
<b>Boiling Point:</b>	No data available.
<b>Flammability:</b>	No data available.
<b>Upper/lower limit on flammability or explosive limits</b>	
<b>Explosive limit - upper:</b>	No data available.
<b>Explosive limit - lower:</b>	No data available.
<b>Flash Point:</b>	224 °C/435 °F (Cleveland open cup)
<b>Auto-ignition temperature:</b>	No data available.
<b>Decomposition Temperature:</b>	No data available.
<b>pH:</b>	6 (5% solution)
<b>Viscosity</b>	
<b>Dynamic viscosity:</b>	57 mPa.s (20 °C/68 °F)
<b>Kinematic viscosity:</b>	No data available.
<b>Flow Time:</b>	No data available.
<b>Solubility(ies)</b>	
<b>Solubility in Water:</b>	Very Soluble
<b>Solubility (other):</b>	Soluble in acetone, chloroform, cyclohexane, ethanol, 2-propanol and toluene
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Vapor pressure:</b>	No data available.
<b>Relative density:</b>	No data available.
<b>Density:</b>	0.975 g/ml (20 °C/68 °F)
<b>Relative vapor density:</b>	No data available.
<b>Particle characteristics</b>	
<b>Particle Size:</b>	No data available.
<b>Particle Size Distribution:</b>	No data available.

## 10. Stability and reactivity

<b>Reactivity:</b>	No data available.
<b>Chemical Stability:</b>	Stable in general.
<b>Possibility of hazardous reactions:</b>	Material is stable under normal conditions.
<b>Conditions to avoid:</b>	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 (Data on similar product)  
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): Not classified undiluted, (Data on similar product)  
Not classified based on available data.

**Serious Eye Damage/Eye Irritation Product:** OECD TG405 Rabbit: Severe undiluted, (Data on similar product)

**Respiratory or Skin Sensitization Product:** Skin sensitization, GPMT Skin: (Guinea Pig): Negative (Data on similar product)  
Skin sensitization, Buehler Skin: (Guinea Pig): Negative (Data on similar product)  
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

**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): 2.1 mg/l

##### Aquatic Invertebrates

**Product:** No data available.

##### Toxicity to Aquatic Plants

**Product:** No data available.

##### Components:

Polyoxyethylene  
polyoxypropylene alkyl  
ethers  
Category 2: (99)

#### Chronic hazards to the aquatic environment:

##### Fish

**Product:** No data available.

##### Aquatic Invertebrates

**Product:** No data available.

**Components:**

Polyoxyethylene  
polyoxypropylene alkyl  
ethers

Category 2: (21)

**Persistence and Degradability:**

**Biodegradation**

**Product:** 80 % (28 d, OECD TG301B) Readily biodegradable (Data on similar product)

**BOD/COD Ratio**

**Product:** No data available.

**Bioaccumulative potential**

**Bioconcentration Factor (BCF)**

**Product:** No data available.

**Partition Coefficient n-octanol / water (log Kow)**

**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**

UN Number:	UN 3082
UN Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Polyoxyethylene polyoxypropylene alkylether)
Transport Hazard Class(es)	
Class:	9
Label(s):	9
EmS No.:	F-A, S-F
Packing Group:	III
Limited quantity	5.00L
Excepted quantity	E1
Environmentally Hazardous:	Yes
Marine Pollutant:	Yes



Special precautions for user: Not Regulated.

## IATA

UN Number:	UN 3082
UN Proper Shipping Name:	Environmentally hazardous substance, liquid, n.o.s. (Polyoxyethylene polyoxypropylene alkylether)
Transport Hazard Class(es):	
Class:	9
Label(s):	9MI (Miscellaneous)
Packing Group:	III
Excepted quantity	E1
Environmentally Hazardous:	Yes
Marine Pollutant:	No
Special precautions for user:	Not Regulated.
Other information	
Passenger and cargo aircraft:	Allowed. 964
Cargo aircraft only:	Allowed. 964
UN Proper Shipping Name (JP):	環境有害物質(液体)(Polyoxyethylene polyoxypropylene alkylether)

## 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.

**Emergency Response Guide Number:** 171

## 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):**

$\alpha$ -(Alkyl(C=6-18))- $\omega$ -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) 3.8%

**Fire Service Act:**

Group 4: Flammable liquids, Type 4 petroleums, Water soluble liquid, Designated Quantity (6000 litre)  
Hazardous rank III

**Ship Safety Law, Dangerous Goods Marine Transport and Storage Rule:**

Miscellaneous dangerous substances and articles

**Air Law, Enforcement Rule:**

Miscellaneous dangerous substances and articles

**Explosives Control Act:**

Not Regulated

**High Pressure Gas Safety Act:**

Not Regulated

**Act on Prevention of Marine Pollution and Maritime Disaster:**

Pack transport, Marine pollutant

**Export Trade Control Order:**

Not Regulated

**Inventory Status:**

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

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**Version #:** 3.0

**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
- (21): Estimation
- (99): Internal study data