

SAFETY DATA SHEET

1. Product and company identification

Name of chemical (Product name): EMULGEN 105

Product No.: B0001904

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 textile products, Additives for paint, Printing ink and toners, Chemical process regulators

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 2
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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 1
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Chronic hazards to the aquatic environment	Category 3
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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: Warning

Hazard Statement: Causes serious eye irritation.
 Very toxic to aquatic life.
 Harmful to aquatic life with long lasting effects.

Precautionary Statements
Prevention:

Wash thoroughly after handling. Avoid release to the environment. Wear eye protection/face protection.

Response:

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. IF ON SKIN: Wash with plenty of soap and water. Collect spillage. Call a POISON CENTER/doctor if you feel unwell.

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(4) lauryl ether	9002-92-0	(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. Get medical attention if symptoms persist.

Ingestion: Call a POISON CENTER or doctor if you feel unwell. Rinse mouth.

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. Use an adequate ventilation. Wash thoroughly after handling. Use personal protective equipment as required.
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 glasses
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 light yellow

Odor:	Slight characteristic odor
Odor Threshold:	No data available.
Freezing point:	5.0 °C/41.0 °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:	182.0 °C/359.6 °F (Cleveland open cup)
Auto-ignition temperature:	No data available.
Decomposition Temperature:	No data available.
pH:	4.0 - 6.0 (5% solution)
Viscosity	
Dynamic viscosity:	38.0 mPa.s (30.0 °C/86.0 °F) 20.0 mPa.s (40.0 °C/104.0 °F) 15.0 mPa.s (50.0 °C/122.0 °F)
Kinematic viscosity:	No data available.
Flow Time:	No data available.
Solubility(ies)	
Solubility in Water:	Emulsifiable in water.
Solubility (other):	Soluble in ethylene glycol, mineral oil and 2-propanol
Partition coefficient (n-octanol/water):	No data available.
Vapor pressure:	No data available.
Relative density:	No data available.
Density:	0.946 g/ml (30.0 °C/86.0 °F) 0.939 g/ml (40.0 °C/104.0 °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:	No data available.
Possibility of hazardous reactions:	Has low reactivity. Has no self-reactivity.
Conditions to avoid:	No data available.
Incompatible Materials:	No data available.

Hazardous Decomposition Products: No data available.

11. Toxicological information

Acute toxicity (list all possible routes of exposure)

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

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

Serious Eye Damage/Eye Irritation Product: No data available.

Components:
 Polyoxyethylene(4) lauryl ether Category 2B: (98)

Respiratory or Skin Sensitization Product: Skin: No data available.
 Not classified based on available data of component(s).
 Respiratory: Classification not possible due to insufficient data.

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

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

In vivo

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

Reproductive toxicity

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

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: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Components:

Polyoxyethylene(4) lauryl ether Category 1: (98)

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Components:
 Polyoxyethylene(4) lauryl ether Category 3: (98)

Persistence and Degradability:

Biodegradation Product: No data available.

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. (Alcohol C12-C16 Poly(1-6)Ethoxylate)
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. (Alcohol C12-C16 Poly(1-6)Ethoxylate)
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)(Alcohol C12-C16 Poly(1-6)Ethoxylate)

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) 90 - 100%

1-Dodecanol (alias: n-Dodecyl alcohol) (From April 1st, 2025) 1 - 10%

Labeling substances:

Poly(oxyethylene) alkyl ether (limited to those the alkyl group is C=12-15 and mixture thereof) (From April 1st, 2025)
 1-Dodecanol (alias: n-Dodecyl alcohol) (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=12-15)-omega-hydroxypoly(oxyethylene) (It is limited that a number-average molecular weight of the polymer is less than 1,000.)
 Alkanol(C=10-16) (only the substances that contain any of C=11-14 components)

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 (limited to those the alkyl group is C=12-15 and mixture thereof)	91%
1-Dodecanol	9.5%

Fire Service Act:

Group 4: Flammable liquids, Type 3 petroleum, Water soluble liquid, Designated Quantity (4000 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 (P)
 Category: Y

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.

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Version #: 2.0

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
(98): CESIO RECOMMENDATIONS for the harmonized classification and labelling of surfactants (May
2021)