

SAFETY DATA SHEET

1. Product and company identification

Name of chemical (Product name): EMULGEN 104P

Product No.: B0001903

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: Quasi-drug use and cosmetic use, Emulsion polymerization use, Additives for paint

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 |
| Unknown toxicity - Health Acute toxicity, inhalation, dust or mist | 100 % |
| Environmental Hazards Acute hazards to the aquatic environment | Category 1 |
| Chronic hazards to the aquatic environment | Category 3 |
| Unknown toxicity - Environment | |
| Acute hazards to the aquatic environment | 0 % |
| Chronic hazards to the aquatic environment | 0 % |
| 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: | Avoid release to the environment. Wash thoroughly after handling. 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. Call a POISON CENTER/doctor if you feel unwell. Collect spillage. |
| 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(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 pale yellow |



| Odem | Characteristic |
|--|--|
| Odor: | Characteristic |
| Odor Threshold: | No data available. |
| Freezing point: | 16 °C/61 °F |
| Boiling Point: | No data available. |
| Flammability: | No data available. |
| Upper/lower limit on flammability or exp | |
| Explosive limit - upper: | No data available. |
| Explosive limit - lower: | No data available. |
| Flash Point: | 186 °C/367 °F (Cleveland open cup) |
| Auto-ignition temperature: | No data available. |
| Decomposition Temperature: | No data available. |
| pH: | 5 - 7.5 (5% solution) |
| Viscosity | |
| Dynamic viscosity: | 40 mPa.s (30 °C/86 °F) 20 mPa.s (40 °C/104 °F) 15 mPa.s (50 °C/122 °F) |
| Kinematic viscosity: | No data available. |
| Flow Time: | No data available. |
| Solubility(ies) | |
| Solubility in Water: | Emulsifiable in water. |
| Solubility (other): | Soluble in ethyl alcohol |
| Partition coefficient (n-octanol/water): | No data available. |
| Vapor pressure: | No data available. |
| Relative density: | No data available. |
| Density: | 0.939 g/ml (30 °C/86 °F) 0.931 g/ml (40 °C/104 °F) 0.924 g/ml (50 °C/122 °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: | 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 Irritati Product: | on No data available. | |
| Components: Polyoxyethylene(4) lauryl ether | Category 2B: (98) | |
| Respiratory or Skin Sensitizatio Product: | n 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 | No data available. | |
|---|---|--|
| Product: | Not classified based on available data of component(s). | |
| In vivo | No data available. | |
| Product: | Not classified based on available data of component(s). | |
| Reproductive toxicity | No data available. | |
| Product: | 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 ExposureProduct: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 aqua | tic 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 Proper Shipping Name: | UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Alcohol C12-C16 Poly(1-6)Ethoxylate) |
|---|---|
| Transport Hazard Class(es) Class: Label(s): EmS No.: | 9 9 F-A, S-F |
| Packing Group: Limited quantity Excepted quantity Environmentally Hazardous: Marine Pollutant: Special precautions for user: | III 5.00L E1 Yes Yes Not Regulated. |



IATA

| UN Number: | UN 3082 |
|-------------------------------|--|
| UN Proper Shipping Name: | Environmentally hazardous substance, liquid, n.o.s. (Alcohol |
| T (11 101 () | 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 | 70 - 80% |
| mixture thereof) (From April 1st, 2025) | |

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

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 | 79% |
|---|------|
| mixture thereof) | |
| | 11% |
| group is C=16-18 and the mixture thereof, and the number average molecular | |
| weight is less than 1,000), alpha-alkenyl-omega-hydroxypoly(oxyethane-1,2-diyl) | |
| (limited to those the alkenyl group is C=16-18 and the mixture thereof, and the | |
| number average molecular weight is less than 1,000), and the mixture thereof | |
| 1-Dodecanol | 5.6% |

Fire Service Act:

Group 4: Flammable liquids, Type 3 petroleums, 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 (AIIC): | 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: | 2021.03.15 |
| Revision Date | 2024.11.28 |
| 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 guidline -- Labelling and Safety Data Sheet (2019) Japan Chemical Industry Association

(96): CESIO RECOMMENDATIONS for the harmonized classification and labelling of surfactants (March 2017)