

Product name:
 EMAL D-4-D

SAFETY DATA SHEET

1. Product and company identification

Name of chemical (Product name): EMAL D-4-D

Product No.: B0001838

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
 Division: Chemical Business
 E-mail: chemical@kao.co.jp

Emergency telephone number: 81-3-5630-7700

2. Hazard(s) identification

GHS classification:

Health Hazards

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 1

Environmental Hazards

Acute hazards to the aquatic environment	Category 2
Chronic hazards to the aquatic environment	Category 3

GHS label elements

Pictograms:



Signal Word: Danger

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Hazard Statement: Causes skin irritation.
Causes serious eye damage.
Toxic to aquatic life.
Harmful to aquatic life with long lasting effects.

Prevention: Avoid release to the environment. Wash thoroughly after handling. Wear protective gloves/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. Immediately call a POISON CENTER or doctor/ physician. IF ON SKIN (or hair): Take off contaminated clothing. Gently wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.

Storage: -

Disposal: Passed to a licensed waste contractor.

Unknown toxicity - Health

Acute toxicity, dermal	9.85 %
Acute toxicity, inhalation, dust or mist	36.26 %

Unknown toxicity - Environment

Acute hazards to the aquatic environment	0 %
Chronic hazards to the aquatic environment	0 %

3. Composition/information on ingredients

Mixtures

General information: No data available.

Chemical name or generic name	CAS number	ISHL	ENCS	Content in percent (%)
Sodium polyoxyethylene alkyl ethers sulfates	Trade Secret			
Sodium isodecyl sulfate	Trade Secret	YES	YES	
Sulfuric acid, mono-C12-15-alkyl esters, sodium salts	Trade Secret			

4. First-aid measures

Description of necessary first-aid measures

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Inhalation:	Remove person to fresh air and keep comfortable for breathing.
Skin Contact:	If skin irritation occurs, get medical advice/attention. Flush skin with running water. Take off contaminated clothing and wash before re-use. Immediately call a POISON CENTER/doctor.
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.

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.

Specific hazards arising from the chemical: Produce irritating or toxic gases in a fire.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: Keep away from sources of ignition and use appropriate extinguishing media. Fight fire from upwind position if possible. Product itself is non-combustible. 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. Risk of producing harmful gases such as carbon monoxide and sulfur oxides. Avoid inhalation of smoke or gases.

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.

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Prevention of secondary hazards:

Risk of slipping. Spilled material forms slippery floor.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation):

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use an adequate ventilation.

Safe handling advice:

Avoid contact with eyes. Use an adequate ventilation. Wash thoroughly after handling. Use personal protective equipment as required.

Contact avoidance measures:

No data available.

Hygiene measures:

No data available.

Storage

Safe storage conditions:

Keep container tightly closed. Store in a well-ventilated place.

Safe packaging materials:

No data available.

Storage Temperature:

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.

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9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Physical state:	Liquid
Form:	Liquid
Color:	Pale yellow, clear
Odor:	Slight characteristic odor
Odor Threshold:	No data available.
Freezing point:	< 68 °F/20 °C
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:	Not detected
Self Ignition Temperature:	No data available.
Decomposition Temperature:	No data available.
pH:	9 (1% available solution)

Viscosity

Dynamic viscosity:	No data available.
Kinematic viscosity:	No data available.
Flow Time:	No data available.

Solubility(ies)

Solubility in Water:	Soluble
Solubility (other):	Poorly soluble in organic solvents
Partition coefficient (n-octanol/water):	No data available.
Vapor pressure:	No data available.
Relative density:	No data available.
Density:	No data available.
Relative vapor density:	No data available.

Particle characteristics

Particle Size Distribution:	No data available.
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10. Stability and reactivity

Reactivity:	No data available.
Chemical Stability:	Stable in general.
Possibility of hazardous reactions:	Has no self-reactivity.
Conditions to avoid:	No data available.

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Incompatible Materials: No data available.

Hazardous Decomposition Products: No data available.

11. Toxicological information

Acute toxicity (list all possible routes of exposure)

Oral Product: ATEmix: 4,237.29 mg/kg

Dermal Product: ATEmix 9,322.03 mg/kg

Inhalation Product: Dusts, mists and fumes: 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.

Components:
 Sodium polyoxyethylene alkyl ethers sulfates Category 2 (96)
 Sodium isodecyl sulfate Category 2 (5)
 Sulfuric acid, mono-C12-15-alkyl esters, sodium salts Category 2 (21)

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

Components:
 Sodium polyoxyethylene alkyl ethers sulfates Category 1 (96)
 Sodium isodecyl sulfate Category 1 (8)
 Sulfuric acid, mono-C12-15-alkyl esters, sodium salts Category 1 (8)

Respiratory or Skin Sensitization Product: Skin: Classification not possible due to insufficient data.
 Respiratory: Classification not possible due to insufficient data.

Carcinogenicity Product: Classification not possible due to insufficient data.

IARC:

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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: 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: No data available.

Aquatic Invertebrates
Product: No data available.

Toxicity to Aquatic Plants
Product: No data available.

Components:
 Sodium polyoxyethylene
 alkyl ethers sulfates
 Category 2 (96)

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Sodium isodecyl sulfate	Category 2: (8)
Sulfuric acid, mono-C12-15-alkyl esters, sodium salts	Category 2: (8)

Chronic 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:

Sodium polyoxyethylene alkyl ethers sulfates	Category 3: (96)
Sodium isodecyl sulfate	Category 3: (89)
Sulfuric acid, mono-C12-15-alkyl esters, sodium salts	Category 3: (21)

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 K_{ow})

Product: No data available.

Mobility in soil:

No data available.

Hazardous to the ozone layer:

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

Further Information:

No data available.

13. Disposal considerations

Disposal methods:

Review "HANDLING AND STORAGE (Section 7)". Passed to a licensed waste contractor. Incinerate with little portions. Risk of producing harmful gases such as carbon monoxide and sulfur oxides.

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Contaminated Packaging: No data available.

14. Transport information

International regulations

IMDG

Not regulated.

IATA

Not regulated.

National Regulations

Domestic Standard: In compliance with domestic law.

15. Regulatory information

Law concerning Pollutant Release and Transfer Register

Class 1 Substance(s):

Sodium dodecyl sulfate	4.6%
Sodium poly (oxyethylene) dodecyl ether sulfonate	2.8%

Industrial Safety and Health Law

Not Regulated

Poisonous and Deleterious Substances Control Act

Not Regulated

Explosives Control Act:

Not Regulated

High Pressure Gas Safety Act:

Not Regulated

Fire Service Act:

Not applicable to dangerous materials / designated flammables.

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

Priority Assessment Chemical Substances (PACs):

Sodium alkyl(C=8-18) sulfate
 Onium salt or sodium salts of alpha-(alkyl(C=10-16))-omega-(sulfoxy)poly[(oxyethylene)(or oxyethylene/oxy(methylethylene))] (It is limited that the average of repeating number of the repeating unit is 1-4.)

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

Not Regulated

Air Law, Enforcement Rule:

Not Regulated

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Export Trade Control Order:
 Not Regulated

Inventory Status:

US TSCA Inventory:	On or in compliance with the inventory
Canada DSL Inventory List:	Not in compliance with the inventory
Australia AICS:	Not in compliance with the inventory
Korea Existing Chemicals Inv. (KECI):	Not in compliance with the inventory
Japan (ENCS) List:	On or in compliance with the inventory
Japan ISHL Listing:	On or in compliance with the inventory
Philippines PICCS:	Not in compliance with the inventory
China Inv. Existing Chemical Substances:	Not in compliance with the inventory
REACH (EU):	Contact us for information
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.

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
- (5): Japan Surfactant Industry Association, GHS category
- (8): OECD SIDS
- (21): Estimation
- (27): FRAGRANCE JOURNAL
- (48): Human & Environmental Risk Assessment on ingredients of European household cleaning products (HERA)
- (89): CESIO_Environmental-Classification-of-Surfactant-according-to-2nd- ATP
- (96): CESIO RECOMMENDATIONS for the harmonized classification and labelling of surfactants (March 2017)