

SAFETY DATA SHEET

1. Identification of the substance or mixture and of the supplier

GHS Product identifier: ELEC EA

Other means of identification SDS number: B0001788

Recommended use of the chemical and restrictions on use

Recommended use: Not available. Recommended restrictions: Not known.

Supplier's details

Manufacturer Company Name: Address: Telephone: Fax: Contact division: E-mail:

Kao Corporation 1-3,Bunka 2-chome,Sumida-ku,Tokyo 131-8501 Japan +81-3-5630-7700 +81-3-5630-7889 Chemical Business chemical@kao.co.jp

Emergency telephone number: +65-3158 1074(For chemical emergencies only)

2. Hazard(s) identification

GHS classification

Physical Hazards Corrosive to metal Category 1 **Health Hazards** Skin Corrosion/Irritation Category 1 Serious Eye Damage/Eye Irritation Category 1 **Unknown toxicity - Health** Acute toxicity, dermal 100 % 100 % Acute toxicity, inhalation, dust or mist **Environmental Hazards** Acute hazards to the aquatic Category 1 environment **Unknown toxicity - Environment** 0 % Acute hazards to the aquatic environment 100 % Chronic hazards to the aquatic environment Label Elements

Pictograms:





| Signal Word: | Danger |
|----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hazard Statement: | May be corrosive to metals. Causes severe skin burns and eye damage. Very toxic to aquatic life. |
| Precautionary Statements | |
| Prevention: | Keep only in original packaging. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. This product may form partially precipitate according to the storage condition. In that case, please warm-up for melting, then use as homogeneous liquid. |
| Response: | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Immediately wash material off the skin thoroughly with 2% acetic acid and plenty of water until slimy feeling disappears. Wash contaminated clothing before reuse. Absorb spillage to prevent material damage. Collect spillage. |
| Storage: | Store in corrosive resistant container with a resistant inner liner. Store locked up. |
| Disposal: | Passed to a licensed waste contractor. |
| Other hazards which do not result in GHS classification: | None. |

3. Composition/information on ingredients

Substances

| Chemical Identity | Common name and synonyms | CAS number | Content in percent (%) |
|----------------------|--------------------------|--------------|------------------------|
| Lauryldiethanolamine | - | Trade Secret | |

4. First-aid measures

Description of necessary first-aid measures



Version: 1.0 Last revised date : -Revision Date: -Issue Date: 2022.05.30

| Inhalation: | Remove person to fresh air and keep comfortable for breathing. Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor. Immediately call a POISON CENTER/doctor. | |
|------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Skin Contact: | Remove/take off immediately all contaminated clothing. Immediately wash material off the skin thoroughly with 2% acetic acid and plenty of water until slimy feeling disappears. | |
| 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: | Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. | |
| Personal Protection for First-aid Responders: | No data available. | |
| Most important symptoms and effects, Symptoms: | both acute and delayed 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 Suitable extinguishing media: | media Powder, alcohol-resistant foam, water spray, carbon dioxide,sand | |
|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Unsuitable extinguishing media: | No data available. | |
| Special hazards arising from the substance or mixture: | Produce irritating or toxic gases in a fire. | |
| 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. Risk of producing harmful gases such as carbon monoxide and nitrogen oxides. Avoid inhalation of smoke or gases. | |

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: SDS SG-B0001788-A Use goggles and protective gloves. Large spills : Remove person to safety. Ensure adequate ventilation.



| Accidental release measures: | Keep away from sources of ignition and prepare extinguishing media. |
|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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. |
| 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. Iron is apt to rust. Plant equipment should be treated with rust-resist. |
|----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safe handling advice: | Keep away from source of ignition. Avoid contact with skin and eyes. This product may form partially precipitate according to the storage condition. In that case, please warm-up for melting, then use as homogeneous liquid. Use an adequate ventilation. Wash thoroughly after handling. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray. |
| 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. Store in corrosive resistant stainless steel container with a resistant inner liner. Store locked up. |
| Safe packaging materials: | No data available. |

8. Exposure controls/personal protection

| Control Parameters Occupational Exposure Limit None of the components have | |
|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Appropriate Engineering Controls: | Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use an adequate ventilation. Iron is apt to rust. Plant equipment should be treated with rust-resist. |
| Individual protection measures | s, such as personal protective equipment |
| Eye/face protection: | Safety goggles or Face shield |
| Hand Protection: | Gloves (alkali-resistant) |
| | |



| Other: | Alkali-resistant protective clothing |
|-------------------------|-------------------------------------------------------------------------------|
| Respiratory Protection: | Use chemical cartridge respirator for alkalines, as appropriate to situation. |
| Hygiene measures: | No data available. |

9. Physical and chemical properties

| Physical state: | Liquid |
|----------------------------------------------|---------------------------------------------------------------------------------------|
| Form: | Liquid |
| Color: | Colorless to pale yellow clear |
| Odor: | Slight characteristic odor |
| Odor Threshold: | No data available. |
| Freezing point: | 55 - 64 °F/13 - 18 °C |
| Boiling Point: | No data available. |
| Flammability: | No data available. |
| Upper/lower limit on flammability o | r explosive limits |
| Explosive limit - upper: | No data available. |
| Explosive limit - lower: | No data available. |
| Flash Point: | 379 °F/193 °C (Cleveland open cup) |
| Self Ignition Temperature: | No data available. |
| Decomposition Temperature: | No data available. |
| pH: | 10 (1% solution) |
| Viscosity | |
| Dynamic viscosity: | 143 mPa.s (68 °F/20 °C) 78 mPa.s (86 °F/30 °C) 46.5 mPa.s (104 °F/40 °C) |
| Kinematic viscosity: | No data available. |
| Flow Time: | No data available. |
| Solubility(ies) | |
| Solubility in Water: | Slightly Soluble Emulsifiable in water. |
| Solubility (other): | Soluble in aromatic solvents Soluble in alcohol and chloroform |
| Partition coefficient (n- octanol/water): | No data available. |
| Vapor pressure: | No data available. |
| Relative density: | No data available. |
| Density: | 0.9134 g/ml (68 °F/20 °C) 0.9069 g/ml (104 °F/40 °C) 0.8996 g/ml (140 °F/60 °C) |



| 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: | 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: | LD 50 (Mouse): 19,041 mg/kg Not classified based on available data. |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dermal Product: | Classification not possible due to insufficient data. |
| 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: | OECD TG404 Rabbit, 4 h: Corrosive undiluted |
| Serious Eye Damage/Eye Irritatio Product: | n No data available. |
| Components: Lauryldiethanolamine | Category 1: (21) |
| Respiratory or Skin Sensitization Product: | Skin: Classification not possible due to insufficient data. Respiratory: Classification not possible due to insufficient data. |



| Product: | Classification not possible due to insufficient data. | |
|---------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|--|
| 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: | No data available. | |
| Other effects: | No data available. | |

12. Ecological information

Ecotoxicity: Acute hazards to the aquatic environment: Fish **Product:** LC 50 (Rainbow Trout, 96 h): 0.57 mg/l **Aquatic Invertebrates** Product: No data available. **Toxicity to Aquatic Plants** Product: No data available. **Components:** Category 1: (21) Lauryldiethanolamine Chronic hazards to the aquatic environment: Fish **Product:** Classification not possible due to insufficient data. **Aquatic Invertebrates** Product: Classification not possible due to insufficient data. **Toxicity to Aquatic Plants Product:** No data available.

Persistence and Degradability



| Biodegradation Product: | 64 % (28 d, OECD TG301B) Readily biodegradable | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| 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. | |
| Other adverse effects: | 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 nitrogen oxides. | |
| Contaminated Packaging: | No data available. | |
| 14. Transport information | | |
| IATA UN Number: UN Proper Shipping Name: Transport Hazard Class(es): Class: Label(s): Packing Group: Excepted quantity Environmentally Hazardous: | UN 2735 Amines, liquid, corrosive, n.o.s.(Alkyldiethanolamine) 8 8 III E1 Yes | |
| Marine Pollutant: Special precautions for user: Other information Passenger and cargo aircraft Cargo aircraft only: | No Not regulated. Allowed. 852 Allowed. 856 | |
| IMDG UN Number: UN Proper Shipping Name: Transport Hazard Class(es) Class: Label(s): EmS No.: | UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S.(Alkyldiethanolamine) 8 8 F-A, S-B | |
| Packing Group: Limited quantity Excepted quantity Environmentally Hazardous: SDS SG-B0001788-A | III 5.00L E1 Yes | 8/10 |



Marine Pollutant: Special precautions for user: Yes Not regulated.

National Regulations

Domestic Standard: In compliance with domestic law.

Emergency Response Guide Number: 153

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Workplace Safety and Health Act and Workplace Safety and Health (General Provisions) Regulations: This product is subjected to the SDS, labelling, PEL and other requirements in the Act/Regulations.

Fire Safety (Petroleum and Flammable Materials) Regulations Not applicable

Inventory Status:

| US TSCA Inventory: | On or in compliance with the inventory |
|---------------------------------------|----------------------------------------|
| Canada DSL Inventory List: | On or in compliance with the inventory |
| Australia AICS: | 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 | On or in compliance with the inventory |
| Substances: | |
| REACH (EU): | Contact us for information |
| Taiwan Chemical Substance Inventory: | On or in compliance with the inventory |

16.Other information, including date of preparation or last revision

| Issue Date: | 2022.05.30 |
|------------------------|--------------------|
| Version #: | 1.0 |
| Source of information: | No data available. |
| Further Information: | No data available. |



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:

(21): Estimation