

# SAFETY DATA SHEET

## 1. Product and company identification

**Name of chemical (Product name):** ELEC HS-12N

**Product No.:** A0000272

**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:** Antistatic agents for plastic products

**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**

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 1
Carcinogenicity	Category 2
Specific Target Organ Toxicity - Single Exposure	Category 2 (Liver)
Specific Target Organ Toxicity - Repeated Exposure	Category 2 (respiratory tract)

**Unknown toxicity - Health**

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

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

**Unknown toxicity - Environment**

Acute hazards to the aquatic environment	36 %
Chronic hazards to the aquatic environment	36 %

**Label Elements**

**Pictograms:**



**Signal Word:**

Danger

**Hazard Statement:**

Causes skin irritation.  
 Causes serious eye damage.  
 Suspected of causing cancer.  
 May cause damage to organs.  
 May cause damage to organs through prolonged or repeated exposure.  
 Harmful to aquatic life.  
 Toxic to aquatic life with long lasting effects.

**Precautionary Statements**

**Prevention:**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. This product may be melted or solidified according to the storage conditions or after the long time storage. Please do not transport or store under high temperature condition.

**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. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. IF exposed or concerned: Call a POISON CENTER/doctor. Collect spillage.

**Storage:**

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

#### Mixtures

Chemical name or generic name	CAS number	ISHL	ENCS	Content in percent (%)
Lauryl diethanolamide	120-40-1	YES	YES	
Diethanolamine	111-42-2	YES	YES	1 - 2%

### 4. First-aid measures

#### Description of first aid measures

**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.

**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:** Water spray, powder

**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:** Use goggles and protective gloves. Large spills : Remove person to safety. Ensure adequate ventilation.
- Methods and material for containment and cleaning up:** Sweep or vacuum spills to drums or containers.
- Environmental Precautions:** Avoid release to the environment.
- Prevention of secondary hazards:** No data available.

**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:** Use an adequate ventilation. Wash thoroughly after handling. Use personal protective equipment as required. Avoid contact with eyes. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using the product. This product may be melted or solidified according to the storage conditions or after the long time storage. Please do not transport or store under high temperature condition.
- Contact avoidance measures:** No data available.

**Storage**

- Safe storage conditions:** Keep container tightly closed. Store in a well-ventilated place. Store locked up.
- Safe packaging materials:** No data available.

## 8. Exposure controls/personal protection

### Control Parameters

#### Occupational Exposure Limits

Components	Type	Exposure Limit Values	Source
Diethanolamine	TWA	1 mg/m3	JPISHL OEL (04 2023)
Diethanolamine - Inhalable fraction and vapor.	TWA	1 mg/m3	ACGIH (2009)

### 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>	Solid
<b>Form:</b>	Needles
<b>Color:</b>	White
<b>Odor:</b>	Slight characteristic odor
<b>Odor Threshold:</b>	No data available.
<b>Melting Point:</b>	No data available.
<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>	Not detected
<b>Auto-ignition temperature:</b>	No data available.
<b>Decomposition Temperature:</b>	No data available.
<b>pH:</b>	No data available.

#### Viscosity

<b>Dynamic viscosity:</b>	No data available.
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<b>Kinematic viscosity:</b>	No data available.
<b>Flow Time:</b>	No data available.
<b>Solubility(ies)</b>	
<b>Solubility in Water:</b>	Separated from the emulsion
<b>Solubility (other):</b>	Soluble in ethanol and n-hexane Soluble in acetone and chloroform
<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>	No data available.
<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>	No data available.
<b>Possibility of hazardous reactions:</b>	Has no self-reactivity.
<b>Conditions to avoid:</b>	No data available.
<b>Incompatible Materials:</b>	No data available.
<b>Hazardous Decomposition Products:</b>	No data available.

## 11. Toxicological information

### Acute toxicity (list all possible routes of exposure)

<b>Oral Product:</b>	LD 50 (Rat, Female, Male): > 2,000 mg/kg Not classified based on available data.
<b>Dermal Product:</b>	No data available. Not classified based on available data of component(s).
<b>Inhalation Product:</b>	Dust and mist: Classification not possible due to insufficient data.
<b>Skin Corrosion/Irritation Product:</b>	OECD TG404 (Rabbit, 4 h): Severe undiluted

**Serious Eye Damage/Eye Irritation**

**Product:** OECD TG405 Rabbit: Severe undiluted

**Respiratory or Skin Sensitization**

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

**Carcinogenicity**

**Product:** No data available.

**Components:**

Diethanolamine Category 2: (52)

**IARC:**

Diethanolamine Group 2B. Possibly carcinogenic to humans.

**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:** 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.

**Components:**

Diethanolamine Category 2: (88): Contains substance(s) below threshold for classification.

**Specific Target Organ Toxicity - Single Exposure**

**Product:** No data available.

**Specific Target Organ Toxicity - Repeated Exposure**

**Product:** No data available.

**Components:**

Diethanolamine Category 2: Liver, Blood, Kidney, Nervous system: (88): Contains substance(s) below threshold for classification.

**Aspiration Hazard**  
**Product:** No data available.

**Other effects:** No data available.

**12. Ecological information**

**Ecotoxicity:**

**Acute hazards to the aquatic environment**

**Fish**

**Product:** LL 50 (Rainbow Trout, 96 h): 13 mg/l

**Aquatic Invertebrates**

**Product:** No data available.

**Toxicity to Aquatic Plants**

**Product:** No data available.

**Components:**

Lauryl diethanolamide      Category 2: (99)  
Diethanolamine              Category 2: (88)

**Chronic hazards to the aquatic environment**

**Fish**

**Product:** No data available.

**Aquatic Invertebrates**

**Product:** No data available.

**Components:**

Lauryl diethanolamide      Category 2: (89)  
Diethanolamine              Category 3: (88)

**Persistence and Degradability**

**Biodegradation**

**Product:** 83 % (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.



**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. Incinerate with little portions. Risk of producing harmful gases such as carbon monoxide and nitrogen oxides.  
**Contaminated Packaging:** No data available.

**14. Transport information**

**International regulations**

**IMDG**

UN Number: UN 3077  
 UN Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Lauryl diethanolamide)  
 Transport Hazard Class(es)  
   Class: 9  
   Label(s): 9  
   EmS No.: F-A, S-F  
 Packing Group: III  
 Limited quantity 5.00KG  
 Excepted quantity E1  
 Environmentally Hazardous: Yes  
 Marine Pollutant: Yes  
 Special precautions for user: Not Regulated.

**IATA**

UN Number: UN 3077  
 UN Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s. (Lauryl diethanolamide)  
 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. 956  
   Cargo aircraft only: Allowed. 956

UN Proper Shipping Name (JP): 環境有害物質(固体)(Lauryl diethanolamide)

**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

<b>15. Regulatory information</b>
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### 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.):**  
 Diethanolamine (Chemical substances that cause skin disorders, etc.) 1 - 2%

**Labeling substances:**  
 Diethanolamine

**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):**

N,N-Bis(2-hydroxyethyl)alkanamide(C=8,10,12,14,16,18, normal chain), (Z)-N,N-bis(2-hydroxyethyl)octadec-9-enamide or (9Z,12Z)-N,N-bis(2-hydroxyethyl)octadeca-9,12-dienamide  
 Diethanolamine

**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):**

N,N-Bis(2-hydroxyethyl)alkanamide (limited to those the alkane is linear chain and C=8, 10, 12, 14, 16 or 18 and mixture thereof), (Z)-N,N-bis(2-hydroxyethyl)octadec-9-enamide and (9Z,12Z)-N,N-bis(2-hydroxyethyl)octadeca-9,12-dienamide and mixture thereof	42%
Diethanolamine	1.8%

**Fire Service Act:**

Not applicable to dangerous materials / designated flammables.

**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 AICS:</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>	Contact us for information
<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.

**Version #:** 6.0  
**Revision Date:** 2024.05.31  
**Issue Date:** 2020.11.12

**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
- (52): IARC Monographs
- (88): ECHA-REACH Registered Substances Database
- (89): CESIO\_Environmental-Classification-of-Surfactant-according-to-2nd- ATP
- (99): Internal study data