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 %

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

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.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Physical state: Solid

Form: Needles

Color: White

Odor: Slight characteristic odor

Odor Threshold: No data available.

Melting Point: No data available.

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

Auto-ignition temperature: No data available.

Decomposition Temperature: No data available.

pH: No data available.

Viscosity

Dynamic viscosity: No data available.

Kinematic viscosity: No data available.

Flow Time: No data available.

Solubility(ies)

Solubility in Water: Separated from the emulsion

Solubility (other): Soluble in ethanol and n-hexane
Soluble in acetone and chloroform

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: 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 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 (Rat, Female, Male): > 2,000 mg/kg
Not classified based on available data.

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.

Skin Corrosion/Irritation
Product: 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

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.):

Diethanolamine	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:

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 Substances:	On or 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.

Version #: 6.0

Revision Date: 2023.10.16

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 guidline -- 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