

SAFETY DATA SHEET

[1.PRODUCT AND COMPANY IDENTIFICATION]

PRODUCT NAME : ELEC EA
 SUPPLIER : Kao Corporation
 ADDRESS : 1-3,Bunka 2-chome,Sumida-ku,Tokyo 131-8501 Japan
 DIVISION : Global Chemical Business
 TELEPHONE NUMBER : 81-3-5630-7700
 FAX NUMBER : 81-3-5630-7889
 E-MAIL ADDRESS : chemical@kao.co.jp
 EMERGENCY TELEPHONE NUMBER : 81-3-5630-7700
 RECOMMENDED USE :
 AND RESTRICTIONS ON USE :

[2.HAZARDS IDENTIFICATION]

GHS CLASSIFICATION

PHYSICAL AND CHEMICAL HAZARDS

CORROSIVE TO METALS : Category 1

HEALTH HAZARDS

ACUTE TOXICITY (Oral) : Not classified
 ACUTE TOXICITY (Dermal) : Not classified
 ACUTE TOXICITY (Inhalation) : Not applicable(Vapours)
 SKIN CORROSION / IRRITATION : Category 1
 SERIOUS EYE DAMAGE / EYE IRRITATION : Category 1
 RESPIRATORY SENSITIZATION : Classification not possible
 SKIN SENSITIZATION : Classification not possible
 GERM CELL MUTAGENICITY : Classification not possible
 CARCINOGENICITY : Classification not possible
 REPRODUCTIVE TOXICITY : Classification not possible
 SPECIFIC TARGET ORGAN TOXICITY
 - SINGLE EXPOSURE : Classification not possible
 - REPEATED EXPOSURE : Classification not possible
 ASPIRATION HAZARD : Classification not possible

ENVIRONMENTAL HAZARDS

HAZARDOUS TO THE AQUATIC ENVIRONMENT

- ACUTE HAZARD : Category 1
 - LONG-TERM HAZARD : Classification not possible
 - HAZARDOUS TO THE OZONE LAYER : Classification not possible

GHS LABEL ELEMENTS

PICTOGRAMS OR SYMBOLS :



SIGNAL WORD : Danger
 HAZARD STATEMENTS : May be corrosive to metals
 Causes severe skin burns and eye damage
 Very toxic to aquatic life
 PRECAUTIONARY STATEMENTS
 PREVENTION : Keep only in original container.
 Do not breathe dust/fume/gas/mist/vapours/spray.

RESPONSE	: Avoid release to the environment. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. 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. Immediately call a POISON CENTER or doctor. 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.
SAFE HANDLING ADVICE	: Refer to SDS. This product may form partially precipitate according to the storage condition. In that case, please warm-up for melting, then use as homogenous liquid.

[3.COMPOSITION / INFORMATION ON INGREDIENTS]

SUBSTANCE OR MIXTURE	: Substance
INGREDIENTS AND CONCENTRATION RANGE	: Lauryldiethanolamine
CAS RN	: Confidential

[4.FIRST-AID MEASURES]

IN CASE OF INHALATION	: Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor.
IN CASE OF SKIN CONTACT	: Immediately call a POISON CENTER or doctor. 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.
IN CASE OF 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 or doctor.
IN CASE OF INGESTION	: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.

[5.FIRE-FIGHTING MEASURES]

EXTINGUISHING MEDIA	: Powder, alcohol-resistant foam, water spray, carbon dioxide,sand
NOT SUITABLE EXTINGUISHING MEDIA	: No information available
SPECIFIC HAZARDS	: Produce irritating or toxic gases in a fire.
SPECIFIC METHODS	: 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.
PROTECTION OF 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 PROCEDURE : Use goggles and protective gloves.
Large spills : Remove person to safety.
Ensure adequate ventilation.
- ENVIRONMENTAL PRECAUTIONS : Avoid release to the environment.
- METHODS FOR 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.
- 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.
- PRECAUTIONS : Keep away from source of ignition.
Avoid contact with eyes and skin.
This product may form partially precipitate according to the storage
condition. In that case, please warm-up for melting, then use as
homogenous liquid.
- SAFE HANDLING ADVICE : Use an adequate ventilation.
Wash thoroughly after handling.
Use personal protective equipment as required.
Do not breathe dust/fume/gas/mist/vapours/spray.

STORAGE

- SUITABLE STORAGE CONDITIONS : Store container tightly closed in well-ventilated place.
Keep away from source of ignition.
Store in corrosive resistant/container with a resistant liner.
Store locked up.
- SAFE PACKAGING MATERIALS : No information available

[8.EXPOSURE CONTROLS / PERSONAL PROTECTION]

- ENGINEERING MEASURES : 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.
- LIMIT VALUES
- ACGIH (TLV) : Not established
- OSHA (PEL) : Not established
- PERSONAL PROTECTIVE EQUIPMENT
- RESPIRATORY PROTECTION : Use chemical cartridge respirator for alkalines, as appropriate to
situation.
- HAND PROTECTION : Gloves (alkali-resistant)
- EYE PROTECTION : Safety goggles or Face shield
- SKIN AND BODY PROTECTION : Alkali-resistant protective clothing
- HYGIENE MEASURES : No information available

[9.PHYSICAL AND CHEMICAL PROPERTIES]

APPEARANCE

- PHYSICAL STATE : Liquid
- COLOUR : Colorless to pale yellow clear
- ODOUR : Slightly characteristic odour
- pH : 10 (1% solution)

SPECIFIC TEMPERATURES / TEMPERATURE RANGES
AT WHICH CHANGES IN PHYSICAL STATE OCCUR

BOILING POINT	:	No information available
MELTING POINT	:	13 - 18 °C (55.4 - 64.4 °F)
FLASH POINT	:	193 °C (379.4 °F) (CLEVELAND open cup method)

FLAMMABILITY OR EXPLOSIVE PROPERTIES

FLAMMABILITY OR EXPLOSIVE LIMITS	:	UPPER LIMIT : No information available LOWER LIMIT : No information available
VAPOUR PRESSURE	:	No information available
VAPOUR DENSITY	:	No information available
DENSITY (SPECIFIC GRAVITY)	:	0.9134 g/mL (20 °C) (68 °F) 0.9069 g/mL (40 °C) (104 °F) 0.8996 g/mL (60 °C) (140 °F)

SOLUBILITY

WATER SOLUBILITY	:	Slightly soluble Emulsifiable
SOLVENT SOLUBILITY	:	Soluble in aromatic solvents. Soluble in alcohol and chloroform.

PARTITION COEFFICIENT: n-
OCTANOL / WATER (log Pow) : No information available

AUTO-IGNITION TEMPERATURE : No information available

DECOMPOSITION TEMPERATURE : No information available

ODOUR THRESHOLD : No information available

EVAPORATION RATE : No information available

FLAMMABILITY (SOLID,GAS) : No information available

VISCOSITY	:	143 mPa.s (20 °C) (68 °F) 78 mPa.s (30 °C) (86 °F) 46.5 mPa.s (40 °C) (104 °F)
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OTHER DATA : No information available

[10.STABILITY AND REACTIVITY]

CHEMICAL STABILITY	:	Stable in general.
POSSIBILITY OF HAZARDOUS REACTIONS	:	No self-reactivity.
CONDITIONS TO AVOID	:	No information available
INCOMPATIBLE MATERIALS	:	No information available
HAZARDOUS DECOMPOSITION PRODUCTS	:	No information available
OTHERS	:	No information available

[11.TOXICOLOGICAL INFORMATION]

ACUTE TOXICITY

Oral	
INFORMATION ON PRODUCT	: Mouse, LD50 : 19041 mg/kg
Dermal	
INFORMATION ON PRODUCT	: No information available
Inhalation	
INFORMATION ON PRODUCT	: No information available
SKIN CORROSION / IRRITATION	
INFORMATION ON PRODUCT	: Rabbit, undiluted, 4 hours semi-occluded application test (OECD404) : irritant

SERIOUS EYE DAMAGE / IRRITATION

INFORMATION ON PRODUCT : No information available

RESPIRATORY OR SKIN SENSITIZATION

RESPIRATORY

INFORMATION ON PRODUCT : No information available

SKIN

INFORMATION ON PRODUCT : No information available

MUTAGENICITY (GERM CELL MUTAGENICITY)

INFORMATION ON PRODUCT : Ames test (TA98,TA100,TA1537, AK-1) : Negative (76)
Micronucleus test (mouse bone-marrow cell) : Negative (76)

CARCINOGENICITY

INFORMATION ON PRODUCT : No information available

IARC : Not listed

NTP : Not listed

EU : Not listed

OSHA : Not listed

REPRODUCTIVE TOXICITY

INFORMATION ON PRODUCT : No information available

SPECIFIC TARGET ORGAN TOXICITY

- SINGLE EXPOSURE

INFORMATION ON PRODUCT : No information available

- REPEATED EXPOSURE

INFORMATION ON PRODUCT : No information available

ASPIRATION HAZARD

INFORMATION ON PRODUCT : No information available

OTHER INFORMATION : No information available

[12.ECOLOGICAL INFORMATION]

ECOTOXICITY : Rainbow trout, 96h, LC50 : 0.57 mg/L

ACUTE HAZARD : No information available

LONG-TERM HAZARD : No information available

PERSISTENCE / DEGRADABILITY : CO2 evolution test (OECD301B) : 64 % (28 days)

MOBILITY IN SOIL : No information available

BIOACCUMULATIVE POTENTIAL : No information available

OTHER ADVERSE EFFECTS : COD(Mn) : 0.39 g/g (JIS K0102)
BOD5 : 0.026 g/g (JIS K0102)
TOD : 2.12 g/g

[13.DISPOSAL CONSIDERATIONS]

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.

Dispose of waste in accordance with local,state and federal regulations.

[14.TRANSPORT INFORMATION]

Follow all regulations in your country or region

INTERNATIONAL REGULATIONS

UN CLASS / UN NUMBER : Class 8 / UN2735

IATA : UN Number UN2735

	Proper Shipping Name	Amines, Liquid, Corrosive, n.o.s.(containing Alkyldiethanolamine)
	Class	8
	Packing Group	III
IMDG	: UN Number	UN2735
	Proper Shipping Name	Amines, Liquid, Corrosive, n.o.s.(containing Alkyldiethanolamine)
	Class	8
	Packing Group	III
	Additional Information	Marine pollutant
SPECIAL PRECAUTIONS FOR USER	: Review "ACCIDENTAL RELEASE MEASURES (Section 6)". Review "HANDLING AND STORAGE (Section 7)". Ensure containers without breakage or leakage. Ensure containers tightly fixed. Follow all regulations in your country or region. Keep away from source of ignition. Emergency Response Guide(ERG) Numbers : 153	

[15.REGULATORY INFORMATION]

Follow all regulations in your country or region.

INVENTORIES	: ENCS(Japan)	Yes
	TSCA(USA)	Yes
	EINECS(EU)	Yes
	AICS(Australia)	Yes
	DSL(Canada)	Yes
	ECL(Korea)	Yes
	PICCS(Philippines)	Yes
	IECSC(China)	Yes

KAO Corporation is not able to check up the regulatory information in regard to the substances in your country or region,therefore,we request this matter would be filled by your responsibility.

[16.OTHER INFORMATION]

REFERENCE	: -Safety data sheet for chemical products - Part 1: Content and order of sections(ISO 11014-1) -International Chemical Safety Cards(ICSC) (Compiler's Guide)(1994) (76)Journal of Public Health
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