Revised Date Set Up Date 1 / 6 October 10, 2014 January 06, 1998

SAFETY DATA SHEET

[1.PRODUCT AND COMPANY IDENTIFICATION]

PRODUCT NAME : ALDEHYDE C-12 LAURYL

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: Not classified

HEALTH HAZARDS

ACUTE TOXICITY (Oral) : Not classified ACUTE TOXICITY (Dermal) : Not classified

ACUTE TOXICITY (Inhalation) : Not applicable(Vapours)

SKIN CORROSION / IRRITATION : Category 2 SERIOUS EYE DAMAGE / EYE : Category 2A

IRRITATION

RESPIRATORY SENSITIZATION : Classification not possible

SKIN SENSITIZATION : Category 1B

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

+AZARDOUS TO THE AQUATIC ENVIRONMENT
- ACUTE HAZARD : Category 2
- LONG-TERM HAZARD : Not classified

- HAZARDOUS TO THE OZONE : Classification not possible

LAYER

GHS LABEL ELEMENTS

PICTOGRAMS OR SYMBOLS :



SIGNAL WORD : Warning

HAZARD STATEMENTS : Causes skin irritation

Causes serious eye irritation

May cause an allergic skin reaction

Toxic to aquatic life

PRECAUTIONARY STATEMENTS

PREVENTION : Do not breathe dust/fume/gas/mist/vapours/spray.

Avoid release to the environment.

Contaminated work clothing should not be allowed out of the workplace.

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Wash thoroughly after handling.

Wear protective gloves/eve 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.

If eye irritation persists: Get medical advice/attention.

IF ON SKIN (or hair): Take off contaminated clothing. Gently wash with

plenty of water and soap. If skin irritation occurs, seek medical

advice/attention.

Call a POISON CENTER or doctor if you feel unwell.

STORAGE

DISPOSAL Passed to a licensed waste contractor.

SAFE HANDLING ADVICE : Refer to SDS.

[3.COMPOSITION / INFORMATION ON INGREDIENTS]

SUBSTANCE OR MIXTURE : Substance INGREDIENTS AND CONCENTRATION: 1-Dodecanal

RANGE

CAS RN : 112-54-9

[4.FIRST-AID MEASURES]

IN CASE OF INHALATION : Remove person to fresh air and keep comfortable for breathing.

IN CASE OF SKIN CONTACT : Gently wash with plenty of soap and water.

> If skin irritation or rash occurs: Get medical advice/attention. Take of contaminated clothing and wash before re-use.

IN CASE OF EYE CONTACT Rinse cautiously with water for several minutes. Remove contact lenses.

if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention. : Call a POISON CENTER or doctor if you feel unwell.

[5.FIRE-FIGHTING MEASURES]

IN CASE OF INGESTION

EXTINGUISHING MEDIA : Powder, alcohol-resistant foam, carbon dioxide, sand

NOT SUITABLE EXTINGUISHING

MEDIA

: No information available

SPECIFIC HAZARDS : No information available

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.

[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

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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.

May cause spontaneous combustion, when absorbed in paper or cloth. To avoid autoignition, used absorbents should be kept wet with water.

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.

Do not store with oxidizing agents or alkalies.

Keep away from source of ignition.

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.

LIMIT VALUES

ACGIH (TLV) : Not established
OSHA (PEL) : Not established

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY PROTECTION : Use as appropriate to situation.

HAND PROTECTION : Rubber gloves
EYE PROTECTION : Safety glasses
SKIN AND BODY PROTECTION : Full-body suit

HYGIENE MEASURES : No information available

[9.PHYSICAL AND CHEMICAL PROPERTIES]

APPEARANCE

PHYSICAL STATE : Liquid

COLOUR : Colorless to light yellow clear

ODOUR : Characteristic odour
pH : No data available
SPECIFIC TEMPERATURES / TEMPERATURE RANGES
AT WHICH CHANGES IN PHYSICAL STATE OCCUR

BOILING POINT : 241.0 °C (465.8 °F)

MELTING POINT : 8.0 °C (46.4 °F)

FLASH POINT : 116.0 °C (240.8 °F) (CLEVELAND open cup method)

FLAMMABILITY OR EXPLOSIVE PROPERTIES

FLAMMABILITY OR EXPLOSIVE : UPPER LIMIT : No information available LOWER LIMIT : No information

LIMITS available

VAPOUR PRESSURE : 4 Pa (25.0 °C) (77 °F)

VAPOUR DENSITY : No information available

DENSITY (SPECIFIC GRAVITY) : 0.831 g/mL (20.0 °C) (68 °F)

SOLUBILITY

WATER SOLUBILITY : Poor

SOLVENT SOLUBILITY : Soluble in ethyl alcohol PARTITION COEFFICIENT: n- : No information available

OCTANOL / WATER (log Pow)

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 : No information available OTHER DATA : No information available

[10.STABILITY AND REACTIVITY]

CHEMICAL STABILITY : Stable in general.

This product gradually oxidizes in air.

POSSIBILITY OF HAZARDOUS

REACTIONS

: No information available

CONDITIONS TO AVOID : Avoid contact with oxidizing agents or bases.

INCOMPATIBLE MATERIALS : No information available HAZARDOUS DECOMPOSITION : No information available

PRODUCTS

OTHERS : May cause spontaneous combustion, when finely distributed.

[11.TOXICOLOGICAL INFORMATION]

ACUTE TOXICITY

Oral

INFORMATION ON PRODUCT : Rat, LD50 : 23.0 g/kg (2)

Dermal

INFORMATION ON PRODUCT : Rabbit, LD50 : > 2.0 g/kg (32)

Inhalation

INFORMATION ON PRODUCT : No information available

SKIN CORROSION / IRRITATION

INFORMATION ON PRODUCT : Rabbit, 500 mg/24h : Moderate (2)

Human, 5 mg/48h: Mild (2)

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 : No information available

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 : No information available OTHER INFORMATION

[12.ECOLOGICAL INFORMATION]

ECOTOXICITY : No information available PERSISTENCE / DEGRADABILITY : No information available MOBILITY IN SOIL : No information available BIOACCUMULATIVE POTENTIAL : No information available

OTHER ADVERSE EFFECTS

: No information available

[13.DISPOSAL CONSIDERATIONS]

Review "HANDLING AND STORAGE (Section 7)".

Passed to a licensed waste contractor.

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 : Not applicable (IMDG, IATA)

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.

[15.REGULATORY INFORMATION]

Follow all regulations in your country or region.

INVENTORIES : ENCS(Japan) 2-494

> TSCA(USA) Yes

EINECS(EU) 203-983-6

AICS(Australia) Yes

DSL(Canada) No(NDSL) ECL(Korea) KE-12824 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]

: -Safety data sheet for chemical products - Part 1: Content and order of REFERENCE

sections(ISO 11014-1)

-International Chemical Safety Cards(ICSC) (Compiler's Guide)(1994)

(2) Registry of Toxic Effects of Chemical Substances (32) RIFM/FEMA FRAGRANCE and FLAVOR DATABASE KCDS-No 000324-10

ALDEHYDE C-12 LAURYL Kao Corporation

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