Set Up Date

December 08, 1997

SAFETY DATA SHEET

[1.PRODUCT AND COMPANY IDENTIFICATION]

PRODUCT NAME : ALDEHYDE C-10 **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 : 81-3-5630-7700 **EMERGENCY TELEPHONE NUMBER**

RECOMMENDED USE

AND RESTRICTIONS ON USE

[2.HAZARDS IDENTIFICATION]

GHS CLASSIFICATION

PHYSICAL AND CHEMICAL HAZARDS

FLAMMABLE LIQUIDS : Category 4

HEALTH HAZARDS

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

ACUTE TOXICITY (Inhalation) : Not applicable(Vapours)

SKIN CORROSION / IRRITATION : Not classified SERIOUS EYE DAMAGE / EYE : Category 2A

IRRITATION

RESPIRATORY SENSITIZATION : Classification not possible

SKIN SENSITIZATION : Not classified

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 2 - LONG-TERM HAZARD : Not classified

- HAZARDOUS TO THE OZONE : Classification not possible

LAYER

GHS LABEL ELEMENTS

PICTOGRAMS OR SYMBOLS



Warning SIGNAL WORD

HAZARD STATEMENTS Combustible liquid

Causes serious eye irritation

Toxic to aquatic life

PRECAUTIONARY STATEMENTS

PREVENTION : Keep away from open flames or hot surfaces. No smoking.

Avoid release to the environment.

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Wash thoroughly after handling.

Wear protective gloves/eye 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: Gently wash with plenty of water and soap. Call a POISON CENTER or doctor if you feel unwell.

In case of fire: Keep away from sources of ignition and use appropriate

extinguishing media.

STORAGE Store in a well-ventilated place. Keep container tightly closed.

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: Decanal

RANGE

CAS RN : 112-31-2

[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.

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.

IN CASE OF INGESTION : Call a POISON CENTER or doctor if you feel unwell.

[5.FIRE-FIGHTING MEASURES]

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.

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

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. **Kao Corporation**

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.

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

18.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

COLOUR : Colorless to light yellow clear

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

BOILING POINT 209.0 °C 408.2 °F) (

MELTING POINT : No information available

FLASH POINT 88.0 °C 190.4 °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 : No information available VAPOUR DENSITY : No information available

DENSITY (SPECIFIC GRAVITY) 0.83 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.

: No information available **INCOMPATIBLE MATERIALS** 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 : 3730 uL/kg (2)

Dermal

INFORMATION ON PRODUCT : Rabbit, LD50 : 5040 uL/kg (2)

Inhalation

INFORMATION ON PRODUCT : No information available

SKIN CORROSION / IRRITATION

INFORMATION ON PRODUCT : Guinea pig, undiluted, 24 hour closed patch test : mean score = 2.4

Guinea pig, undiluted, open application test: mean score = 0.8

(Evaluation criteria of skin reaction: no reaction=0, slight erythema=1, apparent erythema=2, erythema with edema=3, erythema, edema with

crust or necrosis=4)

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

: No information available INFORMATION ON PRODUCT

IARC : Not listed NTP : Not listed EU : Not listed **OSHA** : Not listed

REPRODUCTIVE TOXICITY

: No information available INFORMATION ON PRODUCT

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 : 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) 203-957-4

AICS(Australia) Yes
DSL(Canada) Yes

ECL(Korea) KE-09398

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)

(2) Registry of Toxic Effects of Chemical Substances

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