

SAFETY DATA SHEET

[1.PRODUCT AND COMPANY IDENTIFICATION]

PRODUCT NAME : FLORAMAT
 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
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 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) : Classification not possible(Vapours)
 SKIN CORROSION / IRRITATION : Not classified
 SERIOUS EYE DAMAGE / EYE IRRITATION : Not classified
 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 3
 - LONG-TERM HAZARD : Category 3
 - HAZARDOUS TO THE OZONE LAYER : Classification not possible

GHS LABEL ELEMENTS

PICTOGRAMS OR SYMBOLS : Not applicable
 SIGNAL WORD : Not applicable
 HAZARD STATEMENTS : Harmful to aquatic life with long lasting effects

PRECAUTIONARY STATEMENTS

PREVENTION : Avoid release to the environment.
 RESPONSE : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 IF ON SKIN: Gently wash with plenty of water and soap.
 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 : Ethyl 2-tert-butylcyclohexyl carbonate
RANGE
CAS RN : 67801-64-3

[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.
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.
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
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.
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.
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 clear
ODOUR : Characteristic odour
pH : Not applicable

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

BOILING POINT : No information available
MELTING POINT : No information available
FLASH POINT : 118 °C (244.4 °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) : 0.971 g/mL (25 °C) (77 °F)

SOLUBILITY

WATER SOLUBILITY : Poor
SOLVENT SOLUBILITY : Soluble in ethyl alcohol
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 : No information available
OTHER DATA : No information available

[10.STABILITY AND REACTIVITY]

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

[11.TOXICOLOGICAL INFORMATION]

ACUTE TOXICITY

Oral

INFORMATION ON PRODUCT : Rat, LD50 : > 2000 mg/kg

Dermal

INFORMATION ON PRODUCT : No information available

Inhalation

INFORMATION ON PRODUCT : No information available

SKIN CORROSION / IRRITATION

INFORMATION ON PRODUCT : Non-irritating for skin. (OECD404)

SERIOUS EYE DAMAGE / IRRITATION

INFORMATION ON PRODUCT : Slightly hazardous in case of eye contact (irritant). (OECD405)

RESPIRATORY OR SKIN SENSITIZATION

RESPIRATORY

INFORMATION ON PRODUCT : No information available

SKIN

INFORMATION ON PRODUCT : Non-sensitizer for skin. (OECD406)

MUTAGENICITY (GERM CELL MUTAGENICITY)

INFORMATION ON PRODUCT : Non-mutagenic (OECD471)

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 : Brachydanio rerio (zebra-fish), 96h, LC50 : 10 - 100 mg/L

PERSISTENCE / DEGRADABILITY : Not readily biodegradable.

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) | LVC |
| | TSCA(USA) | Yes |
| | EINECS(EU) | 267-184-4 |
| | AICS(Australia) | Yes |
| | DSL(Canada) | Yes |
| | ECL(Korea) | KE-04707 |
| | 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)

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