
MATERIAL SAFETY DATA SHEET

Issue Date 14-May-98

[1.CHEMICAL PRODUCT AND COMPANY IDENTIFICATION]

PRODUCT NAME : GAMMA DECALACTONE

COMPANY : Kao Corporation
2-1-3,Bunka Sumidaku,TOKYO,131-8501 JAPAN

TELEPHONE NO. : 81-3-5630-7700(International Chemical Department)

EMERGENCY TELEPHONE NO. : 81-3-5630-7700(International Chemical Department)

[2.COMPOSITION / INFORMATION ON INGREDIENTS]

SUBSTANCE / MIXTURE : Substance

CHEMICAL NAME (GENERIC NAME) : γ -Decalactone

CHEMICAL FORMULA : C₁₀H₁₈O₂

CAS RN : 706-14-9

UN No. : Not applicable

EINECS : 211-892-8

TSCA : Yes

OTHER INFORMATION : None

[3.HAZARDS IDENTIFICATION]

FIRE AND EXPLOSION HAZARD : May be ignited by heat, sparks or flames.

POTENTIAL HEALTH EFFECTS : This material is not harmful in case usual handling.
Irritating to skin.
May cause eyes and respiratory system irritation.

ENVIRONMENTAL EFFECTS : No information available.

[4.FIRST-AID MEASURES]

IN CASE OF EYE CONTACT : Immediately hold eyelids open and flush with a stream of water for at least 15 minutes. If necessary seek medical attention.

IN CASE OF SKIN CONTACT : Wash material off the skin with plenty of water and soap. If necessary seek medical attention.

IN CASE OF INHALATION : Remove person to fresh air. If necessary seek medical attention.

IN CASE OF INGESTION : Seek medical attention. Never give anything by mouth to an unconscious person. If possible, rinse out mouth and give one or two glasses of water or milk to drink.

[5.FIRE-FIGHTING MEASURES]

EXTINGUISHING MEASURES : Fight fire from upwind position.
Move container from fire area if you can do it without risk.
Keep unnecessary people away.
Spray or scatter the extinguishing agents directly to the fire.

EXTINGUISHING AGENTS : In case of small fire use powder, carbon dioxide or dry sand.
In case of large fire shut off air by spraying with water or foam.

[6.ACCIDENTAL RELEASE MEASURES]

Small spills : Absorb spills with sand or inert absorbent and flush with
Large spills : Remove person to safety.

Keep away from sources of ignition.
Ensure adequate ventilation.
Dike spills and dispose of in safe area.
Do not discharge into the drains, surface waters or ground

[7.HANDLING AND STORAGE]

HANDLING : Keep away from sources of ignition.
Do not smoke at work.
Handle in well-ventilated areas.
Use eye protection equipment as appropriate to situation.

STORAGE : Keep container tightly closed.
Store in a dark, cool and well-ventilated place.

[8.EXPOSURE CONTROLS / PERSONAL PROTECTION]

ACGIH(TLV) : Not established

OSHA(PEL) : Not established

VENTILATION : Use local exhaust ventilation.

PROTECTIVE MEASURES

RESPIRATORY PROTECTIVE EQUIPMENTS : Use as appropriate to situation.

EYE PROTECTIVE EQUIPMENTS : Safety goggles

HAND PROTECTIVE EQUIPMENTS : Rubber gloves

PROTECTIVE CLOTHINGS : Use as appropriate to situation.

[9.PHYSICAL AND CHEMICAL PROPERTIES]

APPEARANCE : Clear to light yellow liquid

ODOUR : Characteristic odour

BOILING POINT : 281 C (101.3kPa) (2)

VAPOUR PRESSURE : No data available

VAPOUR DENSITY : No data available

VOLATILITY : No data available

MELTING / FREEZING POINT : No data available

SPECIFIC GRAVITY : 0.953 (20.0 C) , 0.953 (68.0 F)

SOLUBILITY

WATER SOLUBILITY : Insoluble

SOLVENT SOLUBILITY : Soluble in ethyl alcohol

pH : No data available

VISCOSITY : No data available

OCTANOL / WATER PARTITION COEFFICIENT : No data available

OTHER INFORMATION : None

[10.REACTIVITY AND STABILITY]

FLASH POINT : 150.0 C , (302.0 F) (Cleveland Open Cup Tester)

AUTOIGNITION TEMPERATURE : No data available

EXPLOSIVE LIMIT IN AIR(LEC) : No data available

EXPLOSIVE LIMIT IN AIR(UEC) : No data available

COMBUSTIBILITY : Yes

OXIDIZABILITY : No

SELF-REACTIVITY / EXPLOSIVITY : No information available

REACTIVITY AND STABILITY : Stable in general
HAZARDOUS COMBUSTION : carbon dioxide
OR DECOMPOSITION PRODUCTS
OTHER INFORMATION : None

[11.TOXICOLOGICAL INFORMATION]

CORROSIVITY : No data available
SKIN IRRITATION : Human,10% in petrolatum, 48 hour closed patch test: Non-irritant (1)
: Rabbit,500 mg/24 h : Moderate (3,4)
EYE IRRITATION : No data available
SENSITIZATION : Human, Maximization test (10% in petrolatum) : Negative (1)
ACUTE TOXICITY : Oral ,rat, LD₅₀ : > 5.0 g/kg (1)
: Skin, rabbit, LD₅₀ : > 5.0 g/kg (1)
SUBCHRONIC EFFECTS : No data available
CHRONIC EFFECTS : No data available
CARCINOGENICITY : No data available
IARC : None of this product's components are listed
NTP : None of this product's components are listed
OSHA : None of this product's components are listed
MUTAGENICITY : No data available
REPRODUCTIVE EFFECTS : No data available
TERATOGENICITY : No data available
OTHER INFORMATION : None

[12.ECOLOGICAL INFORMATION]

BIODEGRADABILITY : No data available
BIOACCUMULATION : No data available
FISH TOXICITY : No data available
OTHER INFORMATION : None

[13.DISPOSAL CONSIDERATIONS]

Review "HANDLING AND STORAGE(Section7)"
Dispose of waste in accordance with local,state and federal regulations.

[14.TRANSPORTATION INFORMATION]

Follow all regulations in your country or region.
PRECAUTIONS : Review "ACCIDENTAL RELEASE MEASURES(Section6)"
: Review "HANDLING AND STORAGE(Section7)"
PROPER SHIPPING NAME : Non hazardous
HAZARD CLASS : Not applicable
UN NO. : Not applicable
PACKING GROUP : Not applicable
HAZARD LABELS : Not applicable

[15.REGULATORY INFORMATION]

Follow all regulations in your country or region.
EINECS : 211-892-8
TSCA : 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]

REFERENCES

- : (1)Opdyke, D.L.J.,Monographs on fragrance Raw Materials, Food and Chemical Toxicology.
(2)Scientific Literature Reviews on Materials in flavor usage, 69 vol., 1974-1979
(3)Registry of Toxic Effects of Chemical Substances NIOSH(Online data)
(4)Sax,N.Irving, Dangerous Properties of Industrial materials,6th Edition,1984
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