

# SAFETY DATA SHEET

## 1. Identification of the substance or mixture and of the supplier

**GHS Product identifier:** FRUITATE

**Other means of identification**

**SDS number:** B0007167

**Recommended use of the chemical and restrictions on use**

**Recommended use:** Not available.

**Recommended restrictions:** Not known.

**Supplier's details**

**Manufacturer**

**Company Name:** Kao Corporation  
**Address:** 1-3,Bunka 2-chome,Sumida-ku,Tokyo 131-8501 Japan  
**Telephone:** +81-3-5630-7700  
**Fax:** +81-3-5630-7889  
**Division:** Chemical Business  
**E-mail:** chemical@kao.co.jp

**Emergency telephone number:** +65-3158 1074(For chemical emergencies only)

## 2. Hazard(s) identification

**GHS classification of substance or mixture, and national or regional information:**

**Health Hazards**

Skin Corrosion/Irritation Category 2

**Environmental Hazards**

Chronic hazards to the aquatic environment Category 2

**Label Elements**

**Pictograms:**



**Signal Word:** Warning

**Hazard Statement:** Causes skin irritation.  
Toxic to aquatic life with long lasting effects.

**Precautionary Statements**

**Prevention:** Wash hands thoroughly after handling. Avoid release to the environment.  
Wear protective gloves.

**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. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention. Collect spillage.

**Storage:** -

**Disposal:** Passed to a licensed waste contractor.

**Other hazards which do not result in GHS classification:** None.

### 3. Composition/information on ingredients

#### Substances

Chemical Identity	Common name and synonyms	CAS number	Concentration*
Ethyl tricyclo[5.2.1.0-2,6]decane-2-carboxylate (endo)	No data available.	80623-07-0	
Ethyl tricyclo[5.2.1.0-2,6]decane-2-carboxylate(exo)	No data available.	80657-64-3	

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

### 4. First-aid measures

#### Description of necessary first-aid measures

**Ingestion:** Call a POISON CENTER or doctor if you feel unwell. Rinse mouth.

**Inhalation:** Remove person to fresh air and keep comfortable for breathing.

**Skin Contact:** If skin irritation occurs, get medical advice/attention. Flush skin with running water. Take off contaminated clothing and wash before re-use.

**Eye contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

### 5. Fire-fighting measures

#### Suitable (and unsuitable) extinguishing media

**Suitable extinguishing media:** Powder, alcohol-resistant foam, carbon dioxide, sand

**Unsuitable extinguishing media:** No data available.

**Specific hazards arising from the chemical:** No data available.

#### Special protective action for fire fighters

**Special fire fighting procedures:** 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.

**Special protective equipment for 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 procedures:** Use goggles and protective gloves. Large spills : Remove person to safety. Ensure adequate ventilation.

**For non-emergency personnel:** Avoid release to the environment.

**For emergency responders:** Avoid release to the environment.

**Environmental Precautions:** Avoid release to the environment.

**Methods and material for containment and 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.

**Notification Procedures:** Keep away from sources of ignition and prepare extinguishing media.

## 7. Handling and storage

**Precautions to ensure safe handling:** Keep away from source of ignition. Use an adequate ventilation. Wash thoroughly after handling. Use personal protective equipment as required.

**Conditions for safe storage, including any incompatibilities:** Keep container tightly closed. Store in a well-ventilated place. Keep away from source of ignition.

## 8. Exposure controls/personal protection

### Control Parameters

#### Occupational Exposure Limits

**Product:** None known.

**Appropriate Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use an adequate ventilation.

### Individual protection measures, such as personal protective equipment

**Eye/face protection:** Safety glasses

**Hand Protection:** Rubber gloves

**Other:** Full-body suit

**Respiratory Protection:** Use as appropriate to situation.

**Hygiene measures:** No data available.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

#### Appearance

**Physical state:** liquid

**Form:** Liquid

<b>Color:</b>	Colorless clear
<b>Odor:</b>	Characteristic odour
<b>Odor Threshold:</b>	No data available.
<b>Freezing point:</b>	< 68 °F/20 °C
<b>Boiling Point:</b>	No data available.
<b>Flammability:</b>	No data available.
<b>Upper/lower limit on flammability or explosive limits</b>	
<b>Explosive limit - upper:</b>	No data available.
<b>Explosive limit - lower:</b>	No data available.
<b>Flash Point:</b>	240.8 °F/116.0 °C (Cleveland open cup)
<b>Self Ignition Temperature:</b>	No data available.
<b>Decomposition Temperature:</b>	No data available.
<b>pH:</b>	No data available.
<b>Viscosity</b>	
<b>Dynamic viscosity:</b>	No data available.
<b>Kinematic viscosity:</b>	No data available.
<b>Flow Time:</b>	No data available.
<b>Solubility(ies)</b>	
<b>Solubility in Water:</b>	The product has poor water-solubility.
<b>Solubility (other):</b>	Soluble in ethyl alcohol
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Vapor pressure:</b>	No data available.
<b>Relative density:</b>	No data available.
<b>Density:</b>	1.043 g/ml (68.0 °F/20.0 °C)
<b>Relative vapor density:</b>	No data available.
<b>Particle characteristics</b>	
<b>Particle Size Distribution:</b>	No data available.

## 10. Stability and reactivity

<b>Reactivity:</b>	No data available.
<b>Chemical Stability:</b>	Stable in general.
<b>Possibility of hazardous reactions:</b>	No data available.
<b>Conditions to avoid:</b>	No data available.
<b>Incompatible Materials:</b>	No data available.
<b>Hazardous Decomposition Products:</b>	No data available.

## 11. Toxicological information

### Acute toxicity (list all possible routes of exposure)

<b>Oral Product:</b>	LD 50 (Rat): > 5.0 g/kg Not classified based on available data.
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**Dermal Product:** LD 50 (Rat) > 2.0 g/kg Not classified  
Not classified based on available data.

**Inhalation Product:** Dusts, mists and fumes: Classification not possible due to insufficient data.  
Vapour: No data available.  
Not classified based on available data of component(s).

**Skin Corrosion/Irritation Product:** No data available.

**Components:**  
Ethyl tricyclo[5.2.1.0-2,6]decane-2-carboxylate (endo) Category 2 (84)  
Ethyl tricyclo[5.2.1.0-2,6]decane-2-carboxylate(exo) Category 2 (87)

**Serious Eye Damage/Eye Irritation Product:** Rabbit: Not classified undiluted  
Not classified based on available data.

**Respiratory or Skin Sensitization Product:** Skin sensitization, GPMT Skin: (Guinea Pig): Negative  
Skin sensitization, Buehler Skin: (Guinea Pig): Negative  
Skin: Not classified based on available data.  
Respiratory: Classification not possible due to insufficient data.

**Carcinogenicity Product:** Classification not possible due to insufficient data.

**Germ Cell Mutagenicity**

**In vitro Product:** Ames test (TA98, TA100, TA1535, TA1537, TA1538): Negative  
Ames test (TA98, TA100, TA1535, TA1537, TA1538, WP2uvrA): Negative  
Chromosome Aberration test: S9(+) Negative, S9(-) Positive  
Micronucleus test: Negative  
Unscheduled DNA synthesis test: Negative  
Classification not possible due to insufficient data.

**In vivo Product:** Classification not possible due to insufficient data.

**Reproductive toxicity Product:** Classification not possible due to insufficient data.

**Specific Target Organ Toxicity - Single Exposure Product:** Classification not possible due to insufficient data.

**Specific Target Organ Toxicity - Repeated Exposure Product:** Not classified Rat, 28 days repeated dose oral toxicity test (OECD TG407) :  
NOTEL (no observed toxic effect level) = 1,000 mg/kg/day  
Not classified based on available data.

**Aspiration Hazard Product:** Classification not possible due to insufficient data.

**Other effects:** No data available.

## 12. Ecological information

### Ecotoxicity:

#### Acute hazards to the aquatic environment:

##### Fish

**Product:** LC 50 (Rainbow Trout, 96 h): 5.1 mg/l

##### Aquatic Invertebrates

**Product:** EC 50 (Daphnia, 48 h): 5.9 mg/l

##### Toxicity to Aquatic Plants

**Product:** ErC50 (Alga, 72 h): 6.24 mg/l (OECD TG201)

#### Chronic hazards to the aquatic environment:

##### Fish

**Product:** No data available.

##### Aquatic Invertebrates

**Product:** NOEC (Daphnia, 21 d): 0.202 mg/l

##### Toxicity to Aquatic Plants

**Product:** No data available.

##### Components:

Ethyl tricyclo[5.2.1.0-2,6]decane-2-carboxylate(exo)      Category 2 (87)

### Persistence and Degradability

#### Biodegradation

**Product:** 54 % (28 d, OECD TG301D)

#### BOD/COD Ratio

**Product:** No data available.

### Bioaccumulative potential

#### Bioconcentration Factor (BCF)

**Product:** Bioconcentration Factor (BCF): 11 - 137 Low Bioconcentration

#### Partition Coefficient n-octanol / water (log Kow)

**Product:** No data available.

#### Mobility in soil:

No data available.

#### Other adverse effects:

No data available.

## 13. Disposal considerations

### Disposal methods

#### Disposal instructions:

Review "HANDLING AND STORAGE (Section 7)". Passed to a licensed waste contractor.

**Contaminated Packaging:** No data available.

<b>14. Transport information</b>
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**IATA**

UN Number:	UN 3082
UN Proper Shipping Name:	Environmentally hazardous substance, liquid, n.o.s.(Ethyl tricyclo[5.2.1.02,6]decane-2-carboxylate)
Transport Hazard Class(es):	
Class:	9
Label(s):	9MI (Miscellaneous)
Packing Group:	III
Excepted quantity	E1
Environmentally Hazardous:	Yes
Marine Pollutant:	No
Special precautions for user:	Not regulated.
Other information	
Passenger and cargo aircraft:	Allowed. 964
Cargo aircraft only:	Allowed. 964

**IMDG**

UN Number:	UN 3082
UN Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Ethyl tricyclo[5.2.1.02,6]decane-2-carboxylate)
Transport Hazard Class(es)	
Class:	9
Label(s):	9
EmS No.:	F-A, S-F
Packing Group:	III
Limited quantity	5.00L
Excepted quantity	E1
Environmentally Hazardous:	Yes
Marine Pollutant:	Yes
Special precautions for user:	Not regulated.

**National Regulations**

**Domestic Standard:** In compliance with domestic law.

**Emergency Response Guide Number :** 171

<b>15. Regulatory information</b>
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**Safety, health and environmental regulations/legislation specific for the substance or mixture**

**Workplace Safety and Health Act and Workplace Safety and Health (General Provisions) Regulations:** This product is subjected to the SDS, labelling, PEL and other requirements in the Act/Regulations.

**Fire Safety (Petroleum and Flammable Materials) Regulations**

Not applicable

**Inventory Status:**

US TSCA Inventory:	On or in compliance with the inventory
Canada DSL Inventory List:	Not in compliance with the inventory
Australia AICS:	On or in compliance with the inventory
Korea Existing Chemicals Inv. (KECI):	Contact us for information
Japan (ENCS) List:	On or in compliance with the inventory
Japan ISHL Listing:	On or in compliance with the inventory
Philippines PICCS:	On or in compliance with the inventory
China Inv. Existing Chemical Substances:	On or in compliance with the inventory
REACH (EU):	Registered
Taiwan Chemical Substance Inventory:	On or in compliance with the inventory

<b>16. Other information, including date of preparation or last revision</b>
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**Issue Date:** 2021.06.14

**Version #:** 1.0

**Source of information:** No data available.

**Further Information:** No data available.

**Disclaimer:** To the best of the manufacturer's knowledge, the information contained herein is accurate. However, neither the manufacturer, nor any of its affiliates, make any representations or warranties (expressed or implied), nor assumes any liability (including liability for any direct, incidental, consequential, or other damages) with respect to the accuracy or completeness of the information contained herein. Such information may be (without limitation) invalid if the specified material is used in combination with another, in a particular process, or under unusual conditions. Determination of suitability of any material for any given purpose is the sole responsibility of the user who assumes all risk and responsibility therefore. All materials may present unknown hazards and should be used with appropriate caution. The manufacturer cannot and does not guarantee that the hazards described herein are the only ones that exist. In the case of the product for fragrance, it's in accordance with the latest standard of IFRA within ordinary use. Contact with the supplier for detail information.

**Reference:**

- (84): IFRA-IOFI LABELING MANUAL
- (87): EU CLP Regulation Annex VI