

SAFETY DATA SHEET JASMONEIGE

1. Identification	
Product identifier	
Product name	JASMONEIGE
Chemical name	Cyclopentaneacetic acid, 3-oxo-2-(2-pentenyl)-, methyl ester
Synonyms; trade names	Cyclopentaneacetic acid, 3-oxo-2-(2-penten-1-yl)-, methyl ester, Methyljasmonate
CAS number	39924-52-2
Recommended use of the che	emical and restrictions on use
Application	Flavor and fragrance ingredient.
Details of the supplier of the s	afety data sheet
Supplier	ZEON CORPORATION 1-6-2, Marunouchi, Chiyoda-ku, Tokyo 100-8246 Japan Tel: +81-3-3216-0542
Contact Person	N.Otsuki@zeon.co.jp
Manufacturer	ZEON CORPORATION 1-6-2, Marunouchi, Chiyoda-ku, Tokyo 100-8246 Japan Tel: +81-3-3216-0542
Emergency telephone number	<u>r</u>
Emergency telephone	+81-3-3216-0542 +81-86-475-0047 (9:00 - 17:00 Japan time, weekdays only) +49-89-19240 (24H) (English / German) +49-211-5267 0 (MonThu. 8:00-16:30, Fri. 8:00-15:30)
2. Hazard(s) identification	
Classification of the substance	e or mixture
OSHA Regulatory Status	This Product is Not Hazardous under the OSHA Hazard Communication Standard.
Physical hazards	Not Classified
Health hazards	Not Classified
Environmental hazards	Not Classified
Label elements	
Hazard statements	
Hazard statements	NC Not Classified
Other hazards Hazards not otherwise classified (HNOC)	NC Not Classified Not applicable.
Other hazards Hazards not otherwise	Not applicable.
Other hazards Hazards not otherwise classified (HNOC)	Not applicable.
Other hazards Hazards not otherwise classified (HNOC) 3. Composition/information or	Not applicable.

Composition comments \geq	97.0%
Chemical formula C	C13H20O3
CAS number 39	9924-52-2

Description of first aid measur	es	
Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Call a poison center/ doctor if you feel unwell.	
Ingestion	Rinse mouth thoroughly with water. Call a poison center/ doctor if you feel unwell.	
Skin Contact	Wash skin thoroughly with soap and water. Remove contaminated clothing. Call a poison center/ doctor if you feel unwell. If skin irritation or rash occurs: Get medical advice/ attention. Wash contaminated clothing before reuse.	
Eye contact	Rinse immediately with plenty of water. Continue to rinse for at least 10 minutes. If eye irritation persists: Get medical advice/ attention.	
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue.	
Most important symptoms and	effects, both acute and delayed	
General information	No information available.	
Indication of immediate medical attention and special treatment needed		
Notes for the doctor	No specific recommendations. Treat symptomatically.	
5. Fire-fighting measures		
Extinguishing media		
Suitable extinguishing media	Larger fires: Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Small fires: Extinguish with alcohol-resistant foam, carbon dioxide or dry powder. Dry sand.	
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.	
Special hazards arising from the	ne substance or mixture	
Specific hazards	Thermal decomposition or combustion products may include the following substances: Irritating gases or vapors. Corrosive gases or vapors. Toxic gases or vapors. Containers can burst violently or explode when heated, due to excessive pressure build-up. Do not allow water to enter the container.	
Hazardous combustion products	Irritating gases or vapors. Corrosive gases or vapors. Toxic gases or vapors.	
Advice for firefighters		
Protective actions during firefighting	Move containers from fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. Fight fire from safe distance or protected location. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. Use fire-extinguishing media suitable for the surrounding fire. Do not allow water to enter the container.	
Special protective equipment	Wear self-contained breathing apparatus. Wear fire/ flame resistant/ retardant clothing. Wear	

Personal precautions, protective equipment and emergency procedures

chemical protective suit.

for firefighters

6. Accidental release measures

Personal precautions	Evacuate area. Keep unnecessary and unprotected personnel away from the spillage. Keep upwind. Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of vapors and contact with skin and eyes. Vapors may accumulate on the floor and in low-lying areas. Ventilate closed spaces before entering them.
Environmental precautions	
Environmental precautions	Avoid the spillage or runoff entering drains, sewers or watercourses. Avoid release to the environment.
Methods and material for cont	ainment and cleaning up
Methods for cleaning up	Ground container and transfer equipment to eliminate sparks from static electricity. Stop leak if safe to do so. Ground/bond container and receiving equipment. Small Spillages: Contain and absorb spillage with sand, earth or other non-combustible material. Vacuum or sweep up material and place in a disposal container. Use only non-sparking tools. Use explosion-proof electrical equipment. Cover powdered spills with plastic sheet or tarpaulin to minimize spreading and protect from water. Do not close container tightly, due to the risk of excessive pressure build-up. Spillage into watercourses: Remove from water surface by skimming or with suitable absorbents. Do not use dispersants. For waste disposal, see Section 13.
Precautionary measures to prevent the occurrence of secondary hazards	Eliminate all sources of ignition. Prevent leakage entering sewers, basements and work pits. Do not allow material to enter confined spaces, due to the risk of explosion. Do not allow water to enter the container.
Reference to other sections	For personal protection, see Section 8. For waste disposal, see section 13.
7. Handling and storage	
Precautions for safe handling	
Usage precautions	Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only in well-ventilated areas. Good general ventilation should be adequate to control worker exposure to airborne contaminants. Ground container and transfer equipment to eliminate sparks from static electricity. Take precautionary measures against static discharges. Avoid swallowing.
Advice on general occupational hygiene	Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Wash at the end of each work shift and before eating, smoking and using the toilet.
Conditions for safe storage, in	cluding any incompatibilities
Storage precautions	Store in tightly-closed, original container in a dry, cool and well-ventilated place. Storage tanks and other containers must be grounded. Keep at temperature not exceeding 5°C/41°F. Keep away from heat, sparks and open flame. Store away from the following materials: Oxidizing agents. Suitable container materials: UN approved containers.
Specific end uses(s)	
Specific end use(s)	The identified uses for this product are detailed in Section 1.
8. Exposure controls/Personal	protection
Ingredient comments	No exposure limits known for ingredient(s).
Exposure controls Appropriate engineering controls	Provide adequate ventilation. Good general ventilation should be adequate to control worker exposure to airborne contaminants. Take precautionary measures against static discharges.

Eye/face protection	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with OSHA 1910.133. The following protection should be worn: Chemical splash goggles.
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with OSHA 1910.138 and be demonstrated to be impervious to the chemical and resist degradation. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.
Other skin and body protection	Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.
Hygiene measures	Provide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke.
Respiratory protection	Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Provide adequate ventilation. Large Spillages: If ventilation is inadequate, suitable respiratory protection must be worn.
Environmental exposure controls	Not regarded as dangerous for the environment.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Liquid.
ppearance	
Color	Colorless to pale yellow.
Ddor	Jasmine flower.
Odor threshold	Not available.
Н	Not available.
Aelting point	Not available.
nitial boiling point and range	Not available.
lash point	156°C Cleveland open cup.
vaporation rate	Not available.
lammability (solid, gas)	Not available.
pper/lower flammability or xplosive limits	Not available.
Other flammability	Not available.
/apor density	7.73
Relative density	1.028 @ 20°C (water = 1)
Solubility(ies)	Insoluble in water. Soluble in the following materials: Alcohols. Ketones. Hydrocarbon

Partition coefficient	Not available.
Auto-ignition temperature	Not available.
Decomposition Temperature	Not available.
Viscosity	Not available.
Explosive properties	Not available.
Oxidizing properties	Not available.
Other information	Not available.
Molecular weight	224.30
10. Stability and reactivity	
Reactivity	There are no known reactivity hazards associated with this product.
Stability	Stable at normal ambient temperatures and when used as recommended.
Possibility of hazardous reactions	There are no known reactivity hazards associated with this product.
Conditions to avoid	Keep away from heat, sparks and open flame. Avoid exposure to high temperatures or direct sunlight.
Materials to avoid	Strong oxidizing agents. Strong acids. Strong alkalis.
Hazardous decomposition products	Thermal decomposition or combustion products may include the following substances: Toxic gases or vapors. Corrosive gases or vapors. Irritating gases or vapors.
products	gases or vapors. Corrosive gases or vapors. Irritating gases or vapors.
products 11. Toxicological information	gases or vapors. Corrosive gases or vapors. Irritating gases or vapors.
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products 11. Toxicological information Information on toxicological eff Routes of exposure Acute toxicity - oral Notes (oral LD ₅₀) Acute toxicity - dermal	gases or vapors. Corrosive gases or vapors. Irritating gases or vapors. fects Skin , Eyes , Ingestion , Inhalation , Health effects: See section 4. LD ₅₀ >2000 mg/kg, Oral, Rat
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products 11. Toxicological information Information on toxicological eff Routes of exposure Acute toxicity - oral Notes (oral LD ₅₀) Acute toxicity - dermal Notes (dermal LD ₅₀) Acute toxicity - inhalation Notes (inhalation LC ₅₀) Skin corrosion/irritation	gases or vapors. Corrosive gases or vapors. Irritating gases or vapors.
products 11. Toxicological information Information on toxicological eff Routes of exposure Acute toxicity - oral Notes (oral LD ₅₀) Acute toxicity - dermal Notes (dermal LD ₅₀) Acute toxicity - inhalation Notes (inhalation LC ₅₀) Skin corrosion/irritation Skin corrosion/irritation	gases or vapors. Corrosive gases or vapors. Irritating gases or vapors.
products 11. Toxicological information Information on toxicological eff Routes of exposure Acute toxicity - oral Notes (oral LD ₅₀) Acute toxicity - dermal Notes (dermal LD ₅₀) Acute toxicity - inhalation Notes (inhalation LC ₅₀) Skin corrosion/irritation Skin corrosion/irritation Animal data Serious eye damage/irritation	gases or vapors. Corrosive gases or vapors. Irritating gases or vapors.

Germ cell mutagenicity	
Genotoxicity - in vitro	Ames test: Negative.
Genotoxicity - in vivo	Not available.
Carcinogenicity Carcinogenicity	Not available. Not established : IARC, NTP, EU, OSHA, ACGIH
	Not available. Not established . IARC, NTF, EO, OSTIA, ACGIT
Reproductive toxicity Reproductive toxicity - fertility	Not available.
Reproductive toxicity - development	Not available.
· Specific target organ toxicity -	
STOT - single exposure	Not available.
Specific target organ toxicity -	repeated exposure
STOT - repeated exposure	Not available.
Aspiration hazard	
Aspiration hazard	Not available.
12. Ecological information	
Toxicity	No data available.
Persistence and degradability	
Persistence and degradability	No data available.
Bioaccumulative potential	
Bio-Accumulative Potential	No data available on bioaccumulation.
Partition coefficient	Not available.
Mobility in soil	
Mobility	This product may be mobile to the atomosphere, water systems and soil.
Other adverse effects	
Other adverse effects	Not known.
13. Disposal considerations	
Waste treatment methods	
Disposal methods	Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.
14. Transport information	
General	The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT).
UN Number	
UN No. (International)	Not applicable.
UN proper shipping name	
Proper shipping name (International)	Not applicable.

Transport hazard class(es) Transport Labels (International)	No transport warning sign required.
Packing group Packing group (International)	Not applicable.
Environmental hazards	
Environmentally Hazardous S No.	ubstance
Special precautions for user	
Not applicable.	
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.
15. Regulatory information	
Regulatory Status	This Product is Not Hazardous under the OSHA Hazard Communication Standard.
Regulatory References	29 CFR 1910. 1200(g) Federal Regulations (OSHA Standard).
<u>US Federal Regulations</u> SARA (311/312) Hazard Cate None	gories
16. Other information	
Training advice	Ensure operatives are trained to minimize exposure. Only trained personnel should use this material.
Revision comments	Revised section(s): 1 , 7 , 8 , 9 , 10 , 15 , 16
Revision date	9/9/2019
Revision	4
NFPA - health hazard	No health hazards specifically noted for fire situations. (0)
NFPA - flammability hazard	Burns only if pre-heated. (1)

NFPA - instability hazard Normally stable. (0)

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.