

Date of issue: 2017/10/18 Date of revision: 2024/10/15

Safety Data Sheet

Section 1. Identification of the substance/mixture and of the company/undertaking Product identifier: Product name: Oleic acid SDS No. : 5774E-2
Relevant identified uses of the substance or mixture and uses advised against Research and Development
Details of the supplier of the safety data sheet Manufacturer/Supplier: KISHIDA CHEMICAL CO., LTD. Address: 3-1, Honmachibashi, Chuo-ku, Osaka, JAPAN Division: Chemical Safety Management Department Telephone number: +81-6-6946-8061 FAX: +81-6-6946-1607

Section 2. Hazards identification

GHS classification and label elements of the product Classification of the substance or mixture (Note) GHS classification without description: Not classified/Classification not possible Label elements No GHS label element No Signal word Specific adverse human health effects See "11. Toxicological Information".

Section 3. Composition/information on ingredients

Mixture/Substance selection:

Substance

Ingredient name	Content (%)	CAS No.	ENCS	Chemical formula
Oleic acid	100	112-80-1	2-609;2-975	CH3(CH2)7CH:CH(C
				H2)7COOH

Note : The figures shown above are not the specifications of the product.

Section 4. First-aid measures

Descriptions of first-aid measures

IF INHALED

Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER/doctor/physician if you feel unwell.

IF ON SKIN

Take off immediately all contaminated clothing. Rinse skin with water or shower.

If skin irritation or rash occurs: Get medical advice/attention.

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 SWALLOWED

Rinse mouth.

Call a POISON CENTER/doctor/physician if you feel unwell.

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media Use appropriate extinguishing media suitable for surrounding facilities. In case of fire, use spraying loaded liquid, foam (water-soluble liquid: alcohol-resistant foam), inactive gases, dry powder, dry sand to extinguish. *Fire Service Act Group 4 Hazardous Materials Unsuitable extinguishing media Indoor Fire Plug System or Outdoor Fire Plug System Sprinkler System Dry Chemical Extinguishing System-Others (except for phosphates etc., Hydrogen Carbonates etc.) Fire Extinguisher Discharging Jet Water/Spraying Water Fire Extinguisher Discharging Jet Loaded Liquid Fire Extinguisher Discharging Dry Extinguishing agents-Others (except for phosphates etc., Hydrogen Carbonates etc.) Water Bucket or Water Tank *Cabinet Order Concerning the Control of Hazardous Materials (Attached Table 5) Group 4 Hazardous Materials Specific hazards arising from the substance or mixture Fire may produce irritating, corrosive and/or toxic gases. Runoff from fire control or dilution water may cause pollution. See "10.Stability and Reactivity". Advice for firefighters Specific fire-fighting measures Evacuate non-essential personnel to safe area. Special protective equipment and precautions for fire-fighters Wear fire resistant or flame retardant clothing.

wear fire resistant or flame retardant clothing.

Wear protective gloves/protective clothing/eye protection/face protection.

Firefighters should wear self-contained breathing apparatus with a full facepiece operated in the positive pressure mode.

Section 6. Accidental release measures

Personnel precautions, protective equipment and emergency procedures

Keep unauthorized personnel away.

Ventilate area until material pick up is complete.

Wear proper protective equipment.

Environmental precautions

Prevent spills from entering sewers, watercourses, low areas or rivers. To be careful not discharged to the environment without being properly handled waste water contaminated. Methods and materials for containment and cleaning up



Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.

Sweep up, place in a bag and hold for waste disposal.

Preventive measures for secondary accident

Collect spillage.

Section 7. Handling and storage

Precautions for safe handling
Preventive measures
(Exposure Control for handling personnel)
Do not breathe dust/fume/gas/mist/vapors/spray.
(Protective measures against fire and explosion)
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No
smoking.
(Exhaust/ventilator)
Exhaust/ventilator should be available.
(Safety treatments)
Avoid contact with skin.
Avoid contact with eyes.
Safety Measures
Wear protective gloves/protective clothing/eye protection/face protection.
Wash hands et al thoroughly after handling.
When using do not eat, drink or smoke.
Any incompatibilities
See "10.Stability and Reactivity".
Storage
Conditions for safe storage
Keep container tightly closed.
Store in a cool, dry place. Do not store in direct sunlight.
Storage in accordance with local/national regulation.
Container and packaging materials for safe handling
Use closed unbreakable containers.

Section 8. Exposure controls/personal protection

Control parameters

Control value and concentration standard value are not available in ISHA.

Exposure controls

Appropriate engineering controls

Do not use in areas without adequate ventilation.

Eye wash station should be available.

Washing facilities should be available.

Individual protection measures

Recommend to use protective equipment in conformity with the standards.

Use appropriate protective equipment in accordance with local/national regulation.

Respiratory protection

Wear respiratory protection (dust-proof mask/gas mask). Select chemical cartridge corresponding to type of gases when using a gas mask.

Hand protection



Wear impervious protective glove. Eye protection Wear eye/face protection. Wear safety goggles in cases gas is generated. Skin and body protection Wear protective clothing.

Section 9. Physical and Chemical Properties

Information on basic physical and chemical properties Physical state: Liquid Color: Pale yellow to yellow Odor: Characteristic odor Melting point/Freezing point: 13.4°C Boiling point or initial boiling point: (Oleic acid)Decomposes below boiling point Boiling range data is not available. Flammability (gases, liquids and solids) data is not available. Lower and upper explosion limit/flammability limit data is not available. Flash point: (Oleic acid) (C.C.) 189°C Auto-ignition temperature: (Oleic acid)363°C Decomposition temperature data is not available. pH data is not available. Kinematic viscosity data is not available. Solubility: Solubility in water: Insoluble Solubility in solvent data is not available. n-Octanol/water partition coefficient: log Pow7.73 (estimated) Vapor pressure data is not available. Density and/or relative density: 0.885~0.906(20°C) Relative vapor density (Air=1) data is not available. Particle characteristics data is not available. Other information

Other information is not available.

Section 10. Stability and Reactivity

Reactivity Not available. Chemical stability Turns yellow to brown on exposure to air. (ICSC 1005) Possibility of hazardous reactions The substance is a weak acid. (ICSC 1005) Conditions to avoid Contact with incompatible materials. Contact with fire source. Incompatible materials Strong bases Hazardous decomposition products Carbon oxides



Section 11. Toxicological Information

Information on toxicological effects Acute toxicity data is not available. Irritant properties Skin corrosion/irritation data is not available. Serious eye damage/irritation data is not available. Allergenic and sensitizing effects data is not available. Mutagenic effects data is not available. Carcinogenic effects data is not available. Carcinogenic effects data is not available. Reproductive toxicity data is not available. Specific target organ toxicity (STOT) STOT-single exposure data is not available. STOT-repeated exposure data is not available. Aspiration hazard data is not available.

Section 12. Ecological Information

Toxicity Toxicity data is not available. Water solubility none (ICSC, 2002) Persistence and degradability Persistence and degradability data is not available. Bioaccumulative potential [Data for components of the product] log Pow=7.73 (estimated) (ICSC, 2002) Mobility in soil Mobility in soil data is not available. Other adverse effects Ozone depleting chemical data is not available.

Section 13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging Waste treatment methods Dispose of contents/container as industrial waste. Accordance with local/national regulation.

Section 14. Transport Information

UN Number or ID Number : Not regulated IMDG Code (International Maritime Dangerous Goods Regulations) UN Number or ID Number : Not regulated IATA (Dangerous Goods Regulations) UN Number or ID Number : Not regulated Environmental hazards Marine pollutants (yes/no) : no



Section 15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

U.S. Toxic Substances Control Act (TSCA) Inventory

Chemicals listed in TSCA Inventory

Applicable

Other regulatory information

Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

Section 16. Other information

References and sources for data

Globally Harmonized System of classification and labelling of chemicals, UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 22nd edit., 2021 UN IMDG Code, 2022 Edition (Incorporating Amendment 41–22) IATA Dangerous Goods Regulations (65th Edition) 2024 2020 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2024 TLVs and BEIs. (ACGIH) JIS Z 7252 : 2019 JIS Z 7253 : 2019 2023 Recommendation on TLVs (JSOH) Supplier's data/information General Disclaimer © KISHIDA CHEMICAL CO., LTD.

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Please provide SDS to customers for selling or transferring.

All chemicals have unknown hazard. Handle the product with care.

This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.

The GHS classification data given here is based on current Japan official data (NITE published in 2022).