

Material Safety Data Sheet

1. Chemical and Company Information

Chemical Name	Sericut Mist Oil
Reference Code	SCM-01
Company Name	KATO Mfg. Co., Ltd.
Address	2-65 Shinmachi, Hiratsuka, Kanagawa Prefecture, Japan
Telephone	0463-36-1511
Fax Number	0463-36-1121
Suggested Use and Prohibitions	Spraying Oil

2. Summary of Hazards and Toxicity

GHS Classification

Physical and Chemical Hazards

Explosives	Not classifiable
Flammable Gases	Not applicable
Flammable Aerosols	Not applicable
Combustion Support/Oxidizing Gases	Not applicable
High-Pressure Gases	Not applicable
Flammable Liquids	No classification
Flammable Solids	Not applicable
Self-Reactive Substances	Not classifiable
Pyrophoric Liquids	No classification
Pyrophoric Solids	Not applicable
Self-Heating Substances	Not classifiable
Substances Flammable in Water	Not classifiable
Oxidizing Liquids	Not classifiable
Oxidizing Solids	Not applicable
Organic Peroxides	Not classifiable
Corrosive to Metals	Not classifiable

Health Hazards

Acute Toxicity (Oral)	Class 5
Acute Toxicity (Skin)	No classification
Acute Toxicity (Inhalation: Gas)	Not applicable
Acute Toxicity (Inhalation: Vapor)	Not classifiable
Acute Toxicity (Inhalation: Dust)	Not applicable

	Acute Toxicity (Inhalation: Mist)	Not classifiable
	Skin Corrosion/Irritation	No classification
	Serious Eye Damage/Eye Irritation	Not classifiable
	Respiratory Organ Sensitization	Not classifiable
	Skin Sensitization	No classification
	Germ Cell Mutagenicity	Not classifiable
	Carcinogenicity	No classification
	Reproductive Toxicology	Not classifiable
	Specific Target Organ Systemic Toxicity (Single Exposure)	Not classifiable
	Specific Target Organ Systemic Toxicity (Repeated Exposure)	Not classifiable
	Aspiration Toxicity	Not classifiable
Environmental Hazards		
	Acute Aquatic Toxicity	No classification
	Chronic Aquatic Toxicity	No classification

Label Elements

Symbols/Pictograms	None
Signal Words	Warning
Hazard Information	Toxic when ingested Toxic when inhaled Prolonged or repeated skin contact may cause minor skin irritation. Eye irritation Keep away from heat, sparks, and flames.
Instructions	[Handling Instructions] Eye contact may cause inflammation. Wear protective eyewear to prevent eye contact. Skin contact may cause inflammation. Wear protective gloves to prevent skin contact. Inhalation of mist may cause nausea. Use respiratory protection to prevent inhalation of mist. Do not ingest. Ingestion may cause diarrhea and vomiting. Although sulfur compounds and other additives are contained, the product is almost noncorrosive because the main ingredients have been carefully selected. However, when storing the workpiece, washing is recommended after machining.

Use alkaline detergent or white kerosene for washing.

Keep out of reach of children.

[First Aid]

If inhaled, move person to fresh air.

Keep victim warm and quiet by covering with a blanket. Seek medical attention if necessary.

In case of eye contact, flush with clean water for at least 15 minutes.

Consult a physician.

In case of skin contact, flush with large amounts of water and soap.

If swallowed, do not induce vomiting. Immediately consult a physician.

In case of mouth contact, wash thoroughly with water.

[Handling of waste oil and containers]

The method of handling is specified by law. Properly handle waste according to that method. If there are any questions, contact the supplier.

[Storage]

To prevent entry of dust and moisture, securely close the lid after use. Avoid direct sunlight and keep in a cool and dark place.

[Characteristics]

In liquid form, facilitating the removal of machining debris.

Formulated with inorganic materials such as sericite (silky mica) and a newly developed heat-radiating ceramic, an inactive sulfide, and an ashless extreme-pressure agent, providing improved machining efficiency and an attractive finish surface due to their antifriction effect.

Extends the life of tools and is effective for small-diameter workpieces, significantly reducing machining time.

Does not harden, unlike paint, and can be easily removed with kerosene or a caustic soda solution, making after-treatment easier.

Also highly effective for fluteless taps.

Can be used for tapping, drilling, and reaming, as well as general machining (e.g., for turning machines, etc.) used for brush coating and pressing.

[Method of Use]

In tapping, apply a small amount at a time with a brush or spray.

3. Composition/Information on Ingredients

Substance

Single Substance or Compound

Mixture

Common Chemical Name or

Generic Name	Vegetable oil, additive mixture	
Alternative Name	No data available	
Concentration or Concentration Range	Canola fatty acid methyl ester	65 mass% or more
	Olefin sulfide	Less than 20 mass%
	Mineral oil	Less than 1 mass%
	Additive blend oil	Less than 14 mass%
Molecular Formula (Molecular Weight)	Not available	
Chemical Properties (Rational Formula or Structural Formula)	Not available	
CAS Number	Confidential	
UN Class and UN Number	Not applicable	
Official Gazette Reference Code (Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.; Industrial Safety and Health Act)	Confidential	
Impurities and Stabilizing Additives That Contribute to the Classification of the Substance	No data available	
Industrial Safety and Health Act	Mineral oil	Less than 1 mass%
PRTR Law	Not applicable	

4. First Aid Measures

Take the following first aid measures. Immediately call a physician and follow all instructions.

Inhalation	Move to fresh air. Cover with a blanket to keep warm and rest. Seek medical attention if necessary.
Skin Contact	Remove contaminated clothing and shoes immediately. Wash the affected area thoroughly with soap and water.
Eye Contact	Flush eyes with clean water for at least 15 minutes. Seek medical attention.
Ingestion	Do not induce vomiting. Seek medical attention immediately. Wash mouth out with water if contaminated.

Most Significant Signs and Symptoms
No data available

5. Firefighting Measures

Extinguishing Media	Fire-extinguishing foam, carbon dioxide, fire-extinguishing powder, desiccant
Prohibited Fire-Extinguishing Means	Water jet
Specific Hazards	

May cause irritation and generate corrosive and toxic gases in case of fire.

Eye and skin contact may cause inflammation of eyes and skin.

Container may explode when heated.

Specific Methods of Firefighting

Wear protective personal equipment for firefighting.

Remove the source of fire (source of combustion) and start firefighting from the windward direction using proper fire-extinguishing media.

Use fire-extinguishing powder and carbon-dioxide fire extinguishers at the initial stage of a fire.

For large fires, use of a foam fire-extinguishing agent to cut off air is effective.

A water jet may spread fire and cause danger.

Protection for Firefighters

Wear an appropriate respirator and protective clothing (heat resistant).

6. Spills

Personal Precautions, Protective Equipment, and Emergency Procedures

Wear appropriate protective equipment (see Section 8, “Exposure Controls/Personal Protection”) to avoid eye and skin contact.

Do not touch a broken container or spilled substances if not wearing appropriate protective clothing.

Stay windward.

Leave lower locations.

Immediately isolate the spill area by maintaining an appropriate distance from the area in all directions.

Keep unauthorized persons from entering the spill area.

Ventilate closed spaces before entering.

Environmental Precautions

Prevent spills from entering rivers and water and sewerage systems.

Collection and Neutralization

Large Spills: Stop the flow of the spill with sand and soil, and guide the flow to a safe place. Then, collect the spill in empty containers as much as possible.

Small Spills: Absorb the spill with soil, sand, sawdust, or rags for collection in empty containers. Then, completely wipe up with rags or other absorbent material.

Methods and Materials for Containment and Cleaning Up

Stop spills if not hazardous.

Ground all equipment when handling spills.

Prevention of Secondary Hazards

Immediately remove all sources of ignition (prohibit smoking, sparks, and flames in the vicinity) and prepare firefighting equipment in case of fire.

Prevent spills from entering water and sewerage drains or closed areas.

Do not leave floors wet. Wet floors are slippery and may cause slipping.

Do not walk on spills.

7. Handling and Storage Instructions

Handling Technical Measures

Provide protective equipment described in Section 8, "Exposure Controls/Personal Protection," and wear protective gloves, protective clothing, and eye/face protection.

Local Exhaust Ventilation

Provide local exhaust ventilation described in Section 8, "Exposure Controls/Personal Protection."

Precautions for Safe Handling

Eye contact may cause inflammation. Wear protective eyewear to prevent eye contact.

Skin contact may cause inflammation. Wear protective gloves to prevent skin contact.

Do not ingest. Ingestion may cause diarrhea and vomiting.

Use a pump to take out the liquid from the container. Do not siphon with the mouth.

Ventilate the area well and securely close the lid after handling.

Keep out of reach of children.

Avoid contact with flames, sparks, or heat. Take static control measures.

Wear conductive clothing and shoes.

Avoidance of Contact

See Section 10, "Stability and Reactivity."

Storage Technical Measures

Roof the storage area with noncombustible materials. Use metal and other lightweight non-combustible roofing materials. Do not provide a ceiling.

Use a floor structure in the storage area that prevents entry and penetration of water.

Use a floor structure in the storage area that prevents penetration of hazardous materials and provide an appropriate slope and appropriate

traps.

Provide natural/artificial lighting and ventilation equipment in the storage area as required for the storage or handling of hazardous materials.

Incompatible Hazardous Materials

See Section 10, "Stability and Reactivity."

Storage Requirements

Tightly close containers after use to prevent entry of dust and water.

Avoid direct sunlight, keep away from sources of ignition and heat, and store in a well-ventilated dark place.

Avoid contact with halogens, strong acids, alkalis, and oxidizers. Do not store together with such substances.

When handling quantities greater than the specified quantities, handle in a manufacturing, storage, or handling area that meets the requirements of the Fire Service Act.

Container and Packaging Materials

No data available

8. Exposure Controls/Personal Protection

Control Concentration Not specified (Workplace assessment criteria: Ministry of Labour Announcement No. 26, March 27, 1995)

Allowable Concentration (Exposure Limits, Biological Exposure Indices)

Japan Society for Occupational Health (2004)

Not specified

Equipment If mist or vapor occurs, close the source of mist or vapor or provide an exhaust ventilation system.

Place equipment near the handling area to flush eyes and wash the body.

Protective Equipment

Respiratory protection

Wear gas masks for organic gases as required.

Protective gloves

Wear oil-resistant gloves for prolonged or repeated handling.

Protective eyewear

Wear goggles if splashes are likely to occur.

Skin and Body Protection

Wear oil-resistant long sleeves for prolonged handling or if likely to become wet. Thoroughly clean wet clothing for reuse.

Hygiene Measures Thoroughly wash hands after handling.

9. Physical and Chemical Properties

Physical State, Form, Color, etc.	Pale yellow liquid
Odor	Odorous
Odor Threshold	No data available
pH	No data available
Melting Point/Freezing Point	No data available
Boiling Point, Initial Boiling Point, and Boiling Range	No data available
Flash Point	Over 200°C
Ignition Point	No data available
Auto-Ignition Temperature	No data available
Flammability (Solid, Gas)	No data available
Explosive Limits	No data available
Vapor Pressure	No data available
Vapor Density	No data available
Evaporation Rate (Butyl acetate = 1)	No data available
Specific Gravity (Density)	0.89 (g/cm ³ , 15°C)
Solubility	Water: insoluble
Octanol/Water Partition Coefficient	No data available
Decomposition Temperature	No data available
Kinematic Viscosity	12.5 (cSt, 40 °C)
Lower Dust Explosion Limit	No data available
Minimum Ignition Energy	No data available
Volumetric Resistance (Electrical Conductivity)	No data available
Volatility	Not available

10. Stability and Reactivity

Chemical Stability/Reactivity	Stable under normal conditions Decomposes and forms soap when mixed with an alkali and heated.
Possibility of Hazardous Reactions	May react with strong oxidizing agents upon contact.
Conditions to Be Avoided	Avoid direct sunlight, heat, sources of ignition, and contact with alkalis and oxidizing agents.
Incompatible Hazardous Materials	Strong oxidizing agents
Hazardous Decomposition Products	Carbon monoxide, carbon dioxide

Flammability	Flammable
Ignitability (Auto-ignitability, water reactivity)	No data available
Oxidizing Properties	No data available
Auto-reactivity/Auto-explosive Properties	No data available
Dust Explosive Properties	No data available
Other	Hydrogen sulfide may be generated by heating.

11. Harmfulness Information

Acute Toxicity

Oral LD50 (rat) is more than 2,000 mg/kg for canola fatty acid methyl ester, the main ingredient, and therefore applies to this product.

Skin LD50 (rat) is more than 5,000 mg/kg for canola fatty acid methyl ester, the main ingredient, and therefore applies to this product.

Inhalation
 Inhalation (gas): Currently no useful data available
 Inhalation (vapor): Currently no useful data available
 Inhalation (dust): Currently no useful data available
 Inhalation (mist): Currently no useful data available

Skin Corrosion/Irritation Canola fatty acid methyl ester, the main ingredient, has been identified in tests using rabbits to have low irritation properties.
 Prolonged or repeated contact may cause irritation.

Serious Eye Damage/Eye Irritation

May cause irritation.

Respiratory or Skin Sensitization

Respiratory Sensitization: Currently no useful data available

Skin Sensitization: Canola fatty acid methyl ester, the main ingredient, has been identified in tests using rabbits to have low irritation properties.

Germ Cell Mutagenicity Currently no useful data available

Carcinogenicity Mineral oil: IARC Group 3
 (Not classifiable for human carcinogenicity)

Reproductive Toxicology Currently no useful data available

Target Organ Systemic Toxicity (Single Exposure)

	Currently no useful data available
Target Organ Systemic Toxicity (Repeated Exposure)	
	Currently no useful data available
Aspiration Toxicity	Currently no useful data available
Other	Currently no useful data available

12. Environmental Impact Information

Migrability	Currently no useful data available
Persistence/Degradability	Currently no useful data available
Bioaccumulation	Currently no useful data available
Ecotoxicity	Canola fatty acid methyl ester, the main ingredient, has an LCO of more than 100 mg/L for fish.

13. Disposal Considerations

Waste Residues and Contaminated Containers /Packages

Waste should be disposed of by the producer of the waste or by an industrial waste management contractor licensed by the prefectural governor, or by a local public entity if appropriate.

If disposed of in a landfill, waste must be incinerated before disposal. Check that the levels of substances in the incineration residue specified by the Cabinet Office are below the limits.

If incinerated, waste must be incinerated or exploded in a safe area and in a safe manner to prevent hazards or damage to nearby persons and properties. Lookout personnel should be stationed.

Open dumping is prohibited.

14. Transport Considerations

International Regulations

IMO Information	Nonhazardous
IATA Information	Nonhazardous
UN No.	Not applicable

Domestic Regulations

RID/ADR Information

Shaking and abrasion of containers during transport should be prevented. If a vehicle is used to transport hazardous materials in quantities greater than the specified quantities, a sign indicating that hazardous materials are being transported should be placed on the vehicle in accordance with the Ministry

of Home Affairs Ordinance. Also, fire-extinguishing equipment suitable for the fire hazard involved should be provided on the vehicle.

Information such as the name, quantity, and hazard class of the product as well as a “No Fires” sign should be provided on the container and the package. Fire Service Act Type 1 and Type 6 hazardous materials and high-pressure gases must not be transported together. Containers should not be stacked higher than 3 m.

IMO Information	Ship Safety Act: The method of transport specified in the Ship Safety Act should be used.
IATA Information	Civil Aeronautics Act: The method of transport specified in the Civil Aeronautics Act should be used.
Precautions	Keep away from flames and sparks.
Specific Safety Measures	Do not stack heavy loads on top. In transportation, avoid direct sunshine; protect the container against damage, corrosion, and leakage; and prevent collapse of cargo.

15. Applicable Laws

Industrial Safety and Health Act; Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.:

Substances to be included in the list of existing chemicals and substances subject to reporting

Fire Service Act:

Type 4 Hazardous Material/Type 4 Petroleum, Hazard Class III, Water Insoluble

Waste Management and Public Cleansing Act:

Industrial waste control (prohibition of spreading and spillage)

Water Pollution Control Law:

Oil discharge control (detected as an n-hexane extract)

Law Relating to the Prevention of Marine Pollution and Maritime Disaster:

Oil discharge control (prohibited in principle)

Sewerage Act:

Mineral oil discharge control (allowable concentration: 5 mg/L)

PRTR Law:

Not applicable

16. Other Information

References, etc.

- (1) ANSI Z129.1-1994, American National Standards Institute.
 - (2) New Illustrated Guide to Intoxication Emergency Calls, Hokendohjinsha Inc.
 - (3) Recommendations on Allowable Concentrations (2004), Japan Society for Occupational Health, Occupational Medicine, Vol. 38, pp 172-183.
 - (4) Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc., Existing Chemical Substances, Handbook, 4th Edition, Chemical Daily.
 - (5) Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices, ACGIH (2004).
 - (6) IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans, Vol. 33.
 - (7) EC Council Directive 67/548/EEC, Annex 1, List of Dangerous Substances.
 - (8) Toxic and Hazardous Materials Handbook, New Edition, pp 528, 690.
 - (9) Guidelines for Preparing Material Safety Data Sheets, Japan Chemical Industry Association.
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Other Information

Material Safety Data Sheets (MSDS) provide the user with information to ensure the safe handling of hazardous chemicals.

This MSDS has been prepared based on the latest reference documents, information, and data available. However, we cannot guarantee the accuracy of the information contained herein.

The instructions provided herein apply to handling under normal conditions of use. When handling under special conditions of use, appropriate safety precautions for such use and the method employed should be taken.

The use of any chemical involves unknown potential hazards. Extreme care should be taken in handling.

The user is responsible for the proper use of this product.
