

SAFETY DATA SHEET

Original Preparation Date: 12/1/08

1. Identification ماريمة الماميية الأر _

Product identifier	Tissue-Tek® Microtome Lubrication Kit
Other means of identification	
Product code	4556
Recommended use	Micortome Lubrication
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/	Distributor information
Manufacturer/Supplier	Sakura Finetek USA Inc.
Address	1750 West 214th St.
	Torrance, CA 90501
Telephone	1-310-972-7800
Emergency phone number	CHEMTREC: 1-800-424-9300
Email	SDSsupport@sakuraus.com
2. Hazard(s) identification	
Physical hazards	Not classified.
Health hazards	Not classified.
OSHA defined hazards	Not classified.
Label elements	
Hazard symbol	None.
Signal word	None.
Hazard statement	The mixture does not meet the criteria for classification.
Precautionary statement	
Prevention	Observe good industrial hygiene practices.
Response	Wash hands after handling.
Storage	Store away from incompatible materials.
Disposal	Dispose of waste and residues in accordance with local authority requirements.
Hazard(s) not otherwise classified (HNOC)	Skin contact with non-hazardous lubricant residues may cause irritation.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

The manufacturer lists no ingredients as hazardous according to OSHA 29 CFR 1910.1200.

4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Remove contaminated clothing. Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Eye and skin contact: Exposure may cause temporary irritation, redness, or discomfort. Inhalation: May cause slight respiratory tract irritation. Ingestion: Exposed individuals may experience vomiting, nausea, and diarrhea.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.

General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
5. Fire-fighting measures	
Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Material will burn in a fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Contain the liquid if possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
Environmental precautions	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handlingAvoid contact with skin and eyes. Observe good industrial hygiene practices.Conditions for safe storage,
including any incompatibilitiesStore in original tightly closed container. Store away from incompatible materials (see Section 10
of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	General ventilation normally adequate.
Individual protection measures,	such as personal protective equipment
Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.
Other	Wear suitable protective clothing.
Respiratory protection	Not normally needed. In case of insufficient ventilation, wear suitable respiratory equipment.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Liquid (oils) and Solid (grease).
Three-component kit. Component A and B: Liquid oil; Component G: Grease.
Components A and B: Brown; Component G: Tan
Not available.
Not available.
Not available.

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Melting point/freezing point	Not available.
Initial boiling point and boiling range	Components A and B: >450°F; Component G: >660°F
Flash point	Components A and B: 450°F; Component G: >450°F
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or exp	losive limits
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Components A and B: Not determined; Component G: Not volatile
Vapor density	Components A and B: >1; Component G: Not volatile
Relative density	< 1 (all components)
Solubility(ies)	
Solubility (water)	Negligilble (all components)
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
10. Stability and reactivity	

The product is stable and non-reactive under normal conditions of use, storage and transport.
Material is stable under normal conditions.
No dangerous reaction known under conditions of normal use.
Contact with incompatible materials.
Strong oxidizing agents.
No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Inhalation overexposure may cause irritation of nasal and respiratory passages.
Skin contact	Prolonged skin contact may cause irritation.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Expected to be a low ingestion hazard. May cause discomfort if swallowed.
Symptoms related to the physical, chemical and toxicological characteristics	Eye and skin contact: Exposure may cause temporary irritation, redness, or discomfort. Inhalation: May cause slight respiratory tract irritation. Ingestion: Exposed individuals may experience vomiting, nausea, and diarrhea.
Information on toxicological eff	fects
Acute toxicity	Not expected to be acutely toxic.
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation. Skin contact with non-hazardous lubricant residues may cause irritation.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization	
Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
IARC Monographs. Overall E	Evaluation of Carcinogenicity
Not listed.	
NTP Report on Carcinogens	
Not listed.	
OSHA Specifically Regulate	d Substances (29 CFR 1910.1001-1050)
Not listed.	
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not an aspiration hazard.
12. Ecological information	
Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability	No data is available on the degradability of this product.

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Bioaccumulative potential	No data available.
Mobility in soil	The product contains substances, which are insoluble in water and which may spread on water surfaces.

Other adverse effects

Oil spills are generally hazardous to the environment.

13. Disposal considerations

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Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

ΙΑΤΑ

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not established. Annex II of MARPOL 73/78 and

the IBC Code

15. Regulatory information

US federal regulations

This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) Not listed. CERCLA Hazardous Substance List (40 CFR 302.4) Not listed. Superfund Amendments and Reauthorization Act of 1986 (SARA) Hazard categories Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No SARA 302 Extremely hazardous substance Not listed. SARA 311/312 Hazardous No chemical SARA 313 (TRI reporting) Not regulated. Other federal regulations Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List Not regulated. Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) Not regulated. Safe Drinking Water Act Not regulated. (SDWA) US state regulations **US. Massachusetts RTK - Substance List** Not regulated.

US. New Jersey Worker and Community Right-to-Know Act

- Not listed.
- US. Pennsylvania Worker and Community Right-to-Know Law
- Not listed. US. Rhode Island RTK

Not regulated.

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

16. Other information, including date of preparation or last revision

Issue date	1-DEC-2008
Revision date	17-AUG-2015
Version #	E
Further information	HMIS® is a registered trade and service mark of the American Coatings Association (ACA).
HMIS® ratings	Health: 1 Flammability: 1 Physical hazard: 0
NFPA ratings	
Disclaimer	Sakura Finetek USA Inc. cannot anticipate all conditions under which this information and its

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