

SAFETY DATA SHEET

PRODUCT NAME	KF grease	Data of issue	5/31/2016
		Date of revision	5/26/2021
		(Confirmation)	

1. Identification of the substance or mixture and the supplier

Product name	KF grease
SDS No.	GHS-0097E
Name of supplier	Kyoto Electronics Manufacturing Co., Ltd.
Address	68 Ninodan-cho, Shinden, Kisshoin, Minami-ku, Kyoto, Japan
Division	Quality Assurance Department
Phone	+81-75-691-4121
Fax	+81-75-691-4127

2. Hazard identification

GHS classification

Physical hazards

Flammable solids	Not classified
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Health hazards

Acute toxicity / Oral	Not classified
Acute toxicity / Dermal	Classification not possible
Acute toxicity / Inhalation	Classification not possible
Skin corrosion / Irritation	Classification not possible
Serious eye damage / Eye irritation	Classification not possible
Respiratory sensitization	Classification not possible
Skin sensitization	Classification not possible
Germ cell mutagenicity	Classification not possible
Carcinogenicity	Classification not possible
Reproductive toxicity	Classification not possible
Specific target organ toxicity (single exposure)	Classification not possible
Specific target organ toxicity (repeated exposure)	Classification not possible
Aspiration hazard	Classification not possible

Environmental hazards

Hazardous to the aquatic environment (acute)	Classification not possible
Hazardous to the aquatic environment (long-term)	Classification not possible
Hazardous to the ozone layer	Not classified

GHS label elements

Symbol	Not applicable
Signal words	Not applicable
Hazard statements	Not applicable
Precautionary statement	
Prevention	Not applicable
Response	Not applicable
Storage	Not applicable
Disposal	Not applicable

Besides GHS hazard class and category

Other information	<ul style="list-style-type: none"> • When heated above 280°C, harmful (corrosive) decomposition gases may be generated. • In the presence of metal catalysts, decomposition may occur even at temperatures below 280°C. • Contact with the skin over a long period of time may cause irritation.
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Other physicochemical hazards

None in particular

3. Composition/Information on ingredients

Distinction of substance or mixture mixture

Chemical name or generic name Fluorinated lubricants

Components

No.	Components name	CAS No.	Molecular formula	Content
1	Perfluoropolyether	Trade secrets	–	–
2	Polytetrafluoroethylene	9002-84-0	–	–
3	Additives	Trade secrets	–	–

4. First-aid measures

If inhaled	• In case of massive inhalation, immediately move to fresh air, keep warm and keep at rest. Get medical advice if necessary.
If on skin	• Wipe off any adhering material and wash well with water and soap. If symptoms such as itching or irritation occur, seek medical advice immediately.
If in eyes	• Flush with clean water for at least 15 minutes, then seek medical attention.
If swallowed	• Wash mouth thoroughly with water. Do not attempt to induce vomiting. Seek medical attention immediately.

5. Fire-fighting measures

Extinguishing media	<ul style="list-style-type: none"> • Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. (the product itself does not burn).
Specific fire extinguishing methods	<ul style="list-style-type: none"> • Cut off ignition sources in the vicinity and extinguish with protective equipment.
Protection of firefighters	<ul style="list-style-type: none"> • When extinguishing a fire, wear respiratory protection to avoid inhaling harmful gases, and extinguish the fire from upwind.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	<ul style="list-style-type: none"> • To prevent exposure, wear protective equipment to prevent inhalation of vapors and contact with skin. If necessary, provide adequate ventilation. • Do not allow anyone other than related personnel to enter the area around the spill. • Remove ignition sources, hot materials, and combustible materials in the vicinity, and prepare fire extinguishing equipment.
Environmental precautions	<ul style="list-style-type: none"> • In order to prevent the discharge of wastewater containing this product into public waters or underground seepage, do not wash off with water floor surfaces where this product has been spilled.
Methods and materials for containment and cleaning up	<ul style="list-style-type: none"> • For small amounts, use a spatula, shovel, etc., or let it absorb into soil or sand, collect it in an empty container with a lid, and wipe it clean with a rag. • Use safe equipment that does not generate sparks. • If there is a large amount, collect it after stopping the flow with earth or sand.

7. Handling and storage

Handling

Technical measures	<ul style="list-style-type: none"> • Use appropriate protective equipment when there is a risk of contact. • Do not heat to more than 280°C or smoke with product-contaminated hands.
Precautions for safe handling	<ul style="list-style-type: none"> • As a general rule, handle at room temperature, being careful not to allow moisture or foreign matter to enter the product. • To prevent exposure, use protective equipment when working. Avoid contact with the skin
Avoiding incompatibilities	<ul style="list-style-type: none"> • Do not eat, drink, or smoke while working.

Storage

Conditions for safe storage	<ul style="list-style-type: none"> • Store tightly closed in a dry, cool, dark place with adequate ventilation.
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Otherwise, comply with the provisions of the relevant laws and regulations.

8. Exposure controls/Personal protection

Occupational exposure limits

Engineering measures Prevent workers from direct contact or exposure.
 Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Personal protective Equipment

Respiratory protection	Wear a gas mask for organic gases, if appropriate.
Hand protection	Wear protective gloves that are oil resistant.
Eye protection	Wear regular or goggle-type protective eyewear with side panels.
Skin and body protection	Wear work clothes and safety shoes.

9. Physical and chemical properties

Appearance (physical state, form, color etc.)

Physical state	grease state
Color	white
Odour	odorless
pH	No information
Melting point/Freezing point	No information
Boiling point, initial boiling point, and boiling range	No information
Flash point	No
Upper flammability or explosive limits	No
Lower flammability or explosive limits	No
Vapour pressure	No information
Specific gravity	Approx. 1.96 at 20°C
Solubility Solubility for water	Insoluble
Solubility for solvents	No information
Partition coefficient : n-octanol / water	No information
Decomposition temperature	No information

10. Stability and reactivity

Reactivity	Stable under normal conditions
Chemical stability	Stable under normal conditions
Possibility of hazardous reactions	Stable under normal conditions

Incompatible materials	Strong base, alkali metal, alkaline earth metal, Lewis acid
Hazardous decomposition products	Heating to 280°C or higher may generate harmful (corrosive) decomposition gases (fluorine compounds).

11. Toxicological information

Acute toxicity

Oral

The toxicity estimate obtained from the sum of the formula $100/(\text{toxicity value of the product to be judged}) = (\text{concentration of each component}/\text{toxicity value of each component})$ is greater than 2000, so the product is not classified.

Skin Corrosion / Irritation

Prolonged contact with skin may cause irritation.

Serious eye damage / Eye irritation

No information

Respiratory susceptibility / Skin susceptibility

No information

Germ cell mutagenicity

No information

Carcinogenic

No information

Reproductive toxicity

No information

Specific target organ toxicity (single exposure)

No information

Specific target organ toxicity (repeated exposure)

No information

Suction respirator harmfulness

No information

12. Ecological information

Ecotoxicity	No information
Persistence and degradability	No information
Bioaccumulation	No information
Mobility in soil	No information
Hazardous to the ozone layer	No information

13. Disposal considerations

Residual waste	<ul style="list-style-type: none"> • Entrust to specialized industrial waste disposers who have received permission from prefectural governor, issue manifesto, and dispose.
Contaminated container and packaging	<ul style="list-style-type: none"> • Entrust to licensed industrial waste disposers to dispose. • Empty containers should be disposed of after the residues are completely removed.

14. Transport information

International regulations

Marine transport

UN number	Not applicable
UN proper shipping name	Not applicable
UN classifications	Not applicable
Packing group	Not applicable

Air transport

UN number	Not applicable
UN proper shipping name	Not applicable
UN classifications	Not applicable
Packing group	Not applicable

Emergency Response Guidebook (NAERG) Not applicable

Domestic regulations Please refer to the law and local regulations, etc. in each country.

15. Regulatory information

16. Other information

References

[1] SDS of suppliers

Contact

Company name	Kyoto Electronics Manufacturing Co., Ltd.
Address	68 Ninodan-cho, Shinden, Kisshoin, Minami-ku, Kyoto, Japan
Division	Quality Assurance Department
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Fax	+81-75-691-4127
Emergency phone number	+81-75-691-4125

Other information

- This safety data sheet (SDS) is issued based on the latest reference, data etc. currently available. The information in this SDS has been carefully assessed, but no guarantee is given for its accuracy. We cannot anticipate all conditions under which this product may be used. It is the user's responsibility to take appropriate safety measures for handling.