

GRITON EF-2200K

 TOHO CHEMICAL INDUSTRY CO., LTD.

Issue date: 9/10/2013

Product code: B598311

Revision date: 5/31/2021

Version: 1.00

Safety Data Sheet

1. Chemical product and company identification

Product name : GRITON EF-2200K

Product code : B598311

Company information

Company : TOHO CHEMICAL INDUSTRY CO., LTD.

: Oppama Plant

: 5-2931, Urago-cho, Yokosuka-shi, Kanagawa, 237-0062, Japan

: TEL: +81-46-865-8278 FAX : +81-46-865-8254

Emergency Telephone Number : +81-46-865-8275

Recommended use of the chemical and restrictions on use

Recommended use : Metalworking fluid

2. Hazards identification

GHS classification

Physical hazards	Explosives	No classification
	Flammable gases	No classification
	aerosol	No classification
	Oxidizing gases	No classification
	Gases under pressure	No classification
	Flammable liquids	No classification
	Flammable solids	No classification
	Self-reactive substances and mixtures	classification not possible
	Pyrophoric liquids	No classification
	Pyrophoric solids	No classification
	Self-heating substances and mixtures	classification not possible
	Substances and mixtures which in contact with water emit flammable gases	No classification
	Oxidizing liquids	No classification
	Oxidizing solids	No classification
	Organic peroxides	No classification
	Corrosive to metals	classification not possible
	Desensitized explosives	No classification
Health hazards	Acute toxicity (oral)	classification not possible
	Acute toxicity (dermal)	classification not possible
	Acute toxicity (inhalation:gas)	No classification
	Acute toxicity (inhalation:vapours)	classification not possible
	Acute toxicity (inhalation:dust/mist)	classification not possible

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	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, short-term (acute)	classification not possible
	Hazardous to the aquatic environment, long-term (chronic)	classification not possible
	Hazardous to the ozone layer	classification not possible

Hazard pictograms (GHS JP) : None

Signal word (GHS JP) : No signal word

Hazard statements (GHS JP) : No hazard statements

Precautionary statements (GHS JP)

Prevention : Wash thoroughly after handling. (P264)

Response : IF SWALLOWED: Call a doctor if you feel unwell. (P301+P312)
IF ON SKIN: Wash with plenty of water. (P302+P352)
IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
(P305+P351+P338)

Storage : Store in a well-ventilated place. Keep container tightly closed.
(P403+P233)

Disposal : Dispose of contents/container to in accordance with local, regional, national and/or international regulation. (P501)

3. Composition/information on ingredients

Distinction of substance or mixture : Mixture

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Name	Concentration (%)	CAS-No.
Refined mineral oil (Highly-refined base oil)	65 – 75	Undisclosed
Anionic surfactant	Undisclosed	Undisclosed
Nonionic surfactant	Undisclosed	Undisclosed
Lubricant agent	Undisclosed	Undisclosed
Antiseptic	Undisclosed	Undisclosed
Water	1 – 5	7732-18-5

Hazardous ingredients : Not classified as a hazardous chemical

4. First aid measures

First aid measures

- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If necessary seek medical advice.
- First-aid measures after skin contact : Wash with plenty of soap and water. If necessary seek medical advice.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If necessary seek medical advice.
- First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

5. Fire fighting measures

- Suitable extinguishing media : Dry powder, Foam, Carbon dioxide, dry sand, Water spray
- Unsuitable extinguishing media : None to our knowledge
- Fire hazard : On burning: release of carbon monoxide - carbon dioxide.
- Hazardous decomposition products in case of fire : Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other toxic gases
- Firefighting instructions : Fight fire from safe distance and protected location.
- Protection during firefighting : Do not attempt to take action without suitable protective equipment.
Self-contained breathing apparatus.
Complete protective clothing.

6. Accidental release measures

Personal Precautions, Protective Equipment and Emergency Procedures

- General measures : Wear suitable protective clothing, gloves and eye or face protection.
Ensure good ventilation of the work station.
Evacuate area.

Environmental precautions

Environmental precautions : Avoid release to the environment.
Discharging into rivers and drains is forbidden.

Methods and Equipment for Containment and Cleaning up

For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Contain large spillage with sand or earth.

Methods for cleaning up : Take up liquid spill into absorbent material.

Prevention Measures for Secondary Accidents : In case of leakage, eliminate all ignition sources.
Spilled material may present a slipping hazard.
Use only non-sparking tools.

7. Handling and storage

Handling

Precautions for safe handling : Ensure good ventilation of the work station.
Wear personal protective equipment.
Open flames prohibited.
Avoid contact with skin and eyes.

Hygiene measures : Do not eat, drink or smoke when using this product.
Always wash hands after handling the product.

Storage

Storage conditions : Store in a well-ventilated place.
Keep cool.
Open flames prohibited.

Technical measures : Store in a well-ventilated place. Keep container tightly closed.

8. Exposure controls / Personal protection equipment

Refined mineral oil (Highly-refined base oil)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	5 mg/m ³ (excluding metal working fluids, highly & severely refined-inhalable particulate matter)
ACGIH chemical category	Not Classifiable as a Human Carcinogen highly and severely refined, Suspected Human Carcinogen highly and severely refined

Appropriate engineering controls : Ensure good ventilation of the work station

Protective equipment

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment

Hand protection : Wear suitable gloves resistant to chemical penetration

Eye protection : Chemical goggles or safety glasses

Skin and body protection : Antistatic clothing including shoes are recommended

Environmental exposure controls : Avoid release to the environment.

9. Physical and chemical properties

Physical state : Liquid
Colour : Pale yellow - reddish brown
Odour : characteristic
pH : 9.5 (10% Aqueous solution)
Melting point : ≤ -5 °C
Freezing point : No data available
Boiling point : No data available
Flash point : Because of the presence of water, a flashpoint cannot be measured
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : No data available
Vapour pressure : No data available
Relative density : 0.91
Density : No data available
Relative gas density : No data available
Solubility : Water: Emulsifiable in water
Partition coefficient n-octanol/water (Log Pow) : No data available
Explosive limits (vol %) : No data available
Viscosity, kinematic: : No data available
Particle characteristics : No data available

10. Stability and reactivity

Reactivity : The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability : Stable under normal conditions.
Possibility of hazardous reactions : No dangerous reaction known under conditions of normal use.
Conditions to avoid : on contact with incompatible materials.
Incompatible materials : Oxidizing agent.
Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

Acute toxicity (oral) : classification not possible
Acute toxicity (dermal) : classification not possible
Acute toxicity (inhalation) : Not applicable (gas)
classification not possible (Vapour)
classification not possible (dust, mist)

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Refined mineral oil (Highly-refined base oil)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 5000 mg/kg
LC50 Inhalation - Rat (Vapours)	> 5 mg/l/4h

Skin corrosion/irritation : classification not possible

GRITON EF-2200K	
pH	9.5 (10% Aqueous solution)

Refined mineral oil (Highly-refined base oil)	
Skin corrosion/irritation - Description	In the rabbit skin irritation tests, the result classified into skin irritation is not obtained. However, dermatitis due to the dilapidation of skin may be caused when prolonged or repeated contact was carried out.

Serious eye damage/irritation : classification not possible

GRITON EF-2200K	
pH	9.5 (10% Aqueous solution)

Refined mineral oil (Highly-refined base oil)	
Serious eye damage/eye irritation - Description	In the rabbit eye irritation tests, the result classified into eye irritation is not obtained.

Respiratory sensitization : classification not possible

Skin sensitization : classification not possible

Refined mineral oil (Highly-refined base oil)	
Skin sensitization - Description	No skin sensitization was admitted to the Buehler test using a guinea pig.

Germ cell mutagenicity : classification not possible

Refined mineral oil (Highly-refined base oil)	
Germ cell mutagenicity - Description	Many in vivo and in vitro mutagenicity tests are carried out, and many results were negative.

Carcinogenicity : classification not possible

Refined mineral oil (Highly-refined base oil)	
Carcinogenicity - Description	It was judged no-carcinogenicity based on the result of the skin exposure test using several types of animals. IARC has classified refined mineral oil into group 3, and the classification of ACGIH is also almost the same. In the evaluation of EU, the classification of carcinogenicity was not classified.

Reproductive toxicity : classification not possible

Refined mineral oil (Highly-refined base oil)	
Reproductive toxicity - Description	In the developmental toxicity and reproductive toxicity test using rat, the reproductive toxicity was not observed. So it was judged no-reproductive toxicity.

STOT-single exposure : classification not possible

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Refined mineral oil (Highly-refined base oil)	
Specific target organ toxicity (single exposure) - Description	In the acute toxicity test, the single exposure toxicity over the specific target organ was not admitted.
STOT-repeated exposure : classification not possible	
Refined mineral oil (Highly-refined base oil)	
Specific target organ toxicity (repeated exposure) - Description	In the dermal and inhalation repeated administration toxicity tests for 4 weeks to 2 years, the influence for the systemic toxicity was not observed.
Aspiration hazard : classification not possible	
Refined mineral oil (Highly-refined base oil)	
Aspiration hazard - Description	Aspiration hazard ; Category 1 (< 20.5mm ² /s (at 40°C))
Viscosity, kinematic	≤ 20.5 mm ² /s

12. Ecological information

Ecotoxicity

Hazardous to the aquatic environment, short-term (acute) : classification not possible
 Hazardous to the aquatic environment, long-term (chronic) : classification not possible

Refined mineral oil (Highly-refined base oil)	
Hazardous to Aquatic Environment - Acute Hazard	Refined mineral oil soils an aquatic life since insoluble to water. 96-hour LC50 > 100mg/L of fishes (Fatheadminnow) NOEL > 100mg/L of fishes (Fatheadminnow, 14-days) 48-hour EC50 > 10000mg/L of crustacea (Daphnia magna) NOEL > 10mg/L of crustacea (Daphnia magna, 21-days) NOEL > 100mg/L of algae (Selenastrum)
Hazardous to Aquatic Environment - Chronic Hazard	Bio-degradability ; 31% (28-days) Not easily degradability although it has bio-degradability essentially
LC50 - Fish [1]	> 100 mg/l (Fatheadminnow)
EC50 - Crustacea [1]	> 10000 mg/l (Daphnia magna)
NOEC chronic fish	> 100 mg/l (Fatheadminnow, 14-days)

Persistence and degradability

GRITON EF-2200K	
Persistence and degradability	No data available
Refined mineral oil (Highly-refined base oil)	
Not rapidly degradable	

Bioaccumulative potential

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Bioaccumulative potential	No data available

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Mobility in soil

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Mobility in soil	No data available

Hazardous to the ozone layer

Ozone : classification not possible
Other adverse effects : No additional information available

13. Disposal considerations

Waste treatment methods : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Ecology - waste materials : Dispose of via an authorised person/ licensed waste disposal contractor or by other suitable waste treatment techniques.

Contaminated container and packaging : Empty the packaging completely prior to disposal.
Dispose of via an authorised person/ licensed waste disposal contractor or by other suitable waste treatment techniques.

14. Transport information

International Regulations

United Nations Recommendations on the Transport of Dangerous Goods(UN RTDG)	Transport by sea(IMDG)	Air transport(IATA)
UN number		
Not applicable	Not applicable	Not applicable
UN proper shipping name		
Not applicable	Not applicable	Not applicable
Transport hazard class(es)		
Not applicable	Not applicable	Not applicable
Packing group		
Not applicable	Not applicable	Not applicable
Environmental hazards		
Not applicable	Not applicable	Not applicable

Marine pollutant : Not applicable
Emergency Response Guide (ERG) Number : 171

15. Regulatory information

Government Inventory Lists

United States(TSCA) : Not listed

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Canada(DSL)	: Not listed
Australia(AICS)	: Not listed
Korea(ECL)	: Not listed
China(IECSC)	: Listed
New Zealand(NZIoC)	: Listed
Philippines(PICCS)	: Not listed
Taiwan(TCSI)	: Listed
Export HS code	: 3403.19-000
HS Code Comment	: Though the Export HS code has been described as reference information, another code might be applicable because of the interpretation and the usage, etc. After selecting the Export HS code in the responsibility of the exporter to export, please correspond appropriately according to the instruction of the customs.
Other information, restriction and prohibition regulations	: The TOHO CHEMICAL INDUSTRY CO, LTD. is not able to check up the regulatory information in regard to the substances in your country or region, therefore we request this matter would be filled by your responsibility. Follow all regulations in your country.

16. Other information

Information contact	: TOHO CHEMICAL INDUSTRY CO., LTD. Chemicals Management Group R&D Division(SDS Section) E-mail ; msds@toho-chem.co.jp
Data sources	: Hazard communication of chemicals based on GHS-Labeling and Safety Data Sheet(SDS)(JIS Z7253:2019). Classification of chemicals based on "Globally Harmonized Systems of Classification and Labeling of Chemicals (GHS)" (JIS Z7252:2019). GHS Classification Guidance for Enterprises (METI). GHS Compliance Guidelines (JCIA). GHS classification (National Institute of Technology and Evaluation(NITE-JAPAN)). Guidance on the preparation of GHS-SDS of surfactant(JSIA)
Other information	: Please contact our sales staff for EU REACH registration. When importing into South Korea, registration may be required based on the Law Concerning Registration and Evaluation of Chemical Substances (K-REACH). Please contact our sales staff for details. If the amount exceeds 100 kg / year when importing a Taiwan Inventory (TCSI) registered or compliant substance into Taiwan (in the case of a mixture, the amount for each component), the first stage registration by the importer is required.

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