

Product name: X-22-9446

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Company name: Shin-Etsu Chemical Co., Ltd. Reference #: GKCRS0 / 03 Version #: 02 Revision date: 05-10-2016



SAFETY DATA SHEET

1. Chemical and company identification

Name of chemical (Product name) **X-22-9446**

MANUFACTURER

COMPANY NAME Shin-Etsu Chemical Co., Ltd.
CONTACT Quality Assurance Department (Gunma Complex)
ADDRESS 13-1, Isobe 2-chome, Annaka-shi, Gunma 379-0195, JAPAN
TELEPHONE NUMBER 027-385-2172
FAX NUMBER 027-385-2753

SUPPLIER

COMPANY NAME Shin-Etsu Chemical Co., Ltd.
CONTACT Planning & Administration Department Silicone Division
ADDRESS 6-1, Ohtemachi 2-chome, Chiyoda-ku, Tokyo 100-0004, JAPAN
TELEPHONE NUMBER 03-3246-5121
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EMERGENCY 027-385-2172 (Holiday/Nighttime : 027-385-2111)

Recommended use of the chemical and restrictions on use

Intended use Fluids, Modified silicone fluids
Lubricating oil
Restrictions on use Industrial use only.

2. Hazards identification

GHS classification

The product is not classified according to GHS.

Other hazards Mist irritating to the respiratory tract. Highly toxic by aerosol inhalation, may cause death.

3. Composition/information on ingredients

Substance or mixture Mixture
(Silicone mixture)

Contains no hazardous ingredients according to GHS.

All components are listed on ENCS under CSCL.
(Contains small volume of new chemical substance.)

4. First aid measures

If inhaled Move to fresh air. Call a physician if symptoms develop or persist.
If on skin Wash skin with soap and water. Get medical attention if irritation develops and persists.
If in eyes Rinse immediately with plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
If swallowed Rinse mouth. Get medical attention immediately.
Protection of first-aid responders Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
Notes to physician Treat symptomatically.

5. Fire-fighting measures

Extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).
Extinguishing media to avoid Do not use a solid water stream as it may scatter and spread fire.
Specific hazards By heating and fire, harmful vapors/gases may be formed.
Nitrogen oxides. Hydrogen fluoride. Hydrogen chloride. (corrosive)
Special fire fighting procedures Move containers from fire area if you can do so without risk.

Protection of fire-fighters Firefighters must use standard protective equipment including flame retardant coat, helmet, gloves, rubber boots, and self-contained breathing apparatus.

6. Accidental release measures

Personal precautions, protective equipment and emergency measures Keep unnecessary personnel away. Wear appropriate personal protective equipment.

Environmental precautions Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

Methods or materials for containment and cleaning up Eliminate sources of ignition.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation) Provide adequate ventilation. Use adequate ventilation when this product is heated at approximately 150 degrees C(300°F) and above in the presence of air.

Safe handling advice Use care in handling/storage. Do not breathe mist or vapor. Do not use this product for consumers' spray.

Contact avoidance measures Refer to section 10: stability and reactivity.

Hygiene measures Do not smoke cigarettes which have come into contact with this product. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice. This product can generate formaldehyde at approximately 150 °C (300 °F) and above in the presence of air. Formaldehyde is a skin and respiratory sensitizer, eye and throat irritant, acute toxicant and potential cancer hazard. So, use adequate ventilation or wear protective equipment such as gloves, goggles, organic vapor respirator or protective clothing when this product is heated at approximately 150 °C (300 °F) and above in the presence of air.

Storage

Safe storage conditions Keep container tightly closed. Store in a cool, dry place out of direct sunlight.

Safe packaging materials Keep in original container.

8. Exposure controls/personal protection

Occupational exposure limits No exposure limits noted for ingredient(s).

Engineering measures Provide adequate general and local exhaust ventilation. Provide eyewash station.

Personal protective equipment

Respiratory protection If ventilation is insufficient when heating use chemical respirator with organic vapor cartridge.

Hand protection Wear protective gloves.

Eye protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear suitable protective clothing.

9. Physical and chemical properties

Appearance

Form Liquid.

Color Light yellow. Slightly hazy

Odor Amine odor

pH Not measurable (Refer to water solubility)

Melting point/Freezing point No data

Boiling point, initial boiling point, and boiling range No data

Flash point > 201.2 °F (> 94 °C) Closed Cup
> 500 °F (> 260 °C) Open Cup

Auto-ignition temperature	No data
Flammability limit - lower (%)	No data
Flammability limit - upper (%)	No data
Vapor pressure	Negligible (25 °C)
Vapor density	Not applicable
Evaporation rate	Negligible (Butyl Acetate=1)
Specific gravity	1.02 (25 °C)
Solubility (Water)	Not soluble
Partition coefficient (n-octanol/water)	Not applicable
Decomposition temperature	Not available.
Viscosity	260 mm ² /s (25 °C)
Molecular weight	Not applicable

10. Stability and reactivity

Reactivity	No hazardous reaction known under normal conditions of use, storage and transport.
Chemical stability	Stable at normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	None specific.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Thermal breakdown of this product during fire or very high heat condition may evolve the following hazardous decomposition product: Carbon oxides and traces of incompletely burned carbon compounds. Silicon dioxide. Hydrogen chloride. Fluorine compounds. Nitrogen oxides. Formaldehyde.

11. Toxicological information

Acute toxicity	None known.
Other information	In studies of rats, specific aminofunctional silicones showed high toxicity by inhalation (LC50 < 0.5 mg/L/4hr). However, similar toxicity was not observed for other exposure routes, oral or dermal. This product can generate formaldehyde at approximately 150 °C (300 °F) and above in the presence of air. Formaldehyde is a skin and respiratory sensitizer, eye and throat irritant, acute toxicant and potential cancer hazard. So, use adequate ventilation or wear protective equipment such as gloves, goggles, organic vapor respirator or protective clothing when this product is heated at approximately 150 °C (300 °F) and above in the presence of air.

12. Ecological information

Ecotoxicity	None known.
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13. Disposal considerations

Local disposal regulations	Incinerate. Incinerator should be appropriately equipped for Fluoro gass , silica and other fine powder which the product will generate in incineration. Workers should wear appropriate personal protective equipment(s) such as respirator. Contract with a disposal operator licensed by the Law on Disposal and Cleaning. Dispose of contents/container in accordance with local/regional/national/international regulations.
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14. Transport information

International regulations

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code This product is not intended to be transported in bulk.

National regulations Follow regulation in section 15 for domestic transportation.

15. Regulatory information

Industrial Safety and Health Act

Specified substances regulation

Class 1 designated chemical substances

Not applicable

Class 2 designated chemical substances

Not applicable

Class 3 designated chemical substances

Not applicable

Organic solvent regulation

Class 1 organic solvents

Not applicable

Class 2 organic solvents

Not applicable

Class 3 organic solvents

Not applicable

Notifiable substances

Not applicable

Labeling substances

Not applicable

Poisonous and Deleterious Substances Control Act

Specified poisonous substances

Not regulated.

Poisonous substances

Not regulated.

Deleterious substances

Not regulated.

Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.

Class I specified chemical substances

Not regulated.

Class II specified chemical substances

Not regulated.

Monitoring chemical substances

Not regulated.

Priority Assessment Chemical Substances (PACs)

Not regulated.

Law concerning Pollutant Release and Transfer Register

Specified class 1 substances (substance name, ordinance number and content)

Not applicable

Class 1 substances (substance name, ordinance number and content)

Not applicable

Class 2 substances (substance name, ordinance number and content)

Not applicable

Fire Service Act

Designated combustible material (Combustible liquids)

Ship Safety Law, Dangerous Goods Marine Transport and Storage Rule

Not regulated.

Air Law, Enforcement Rule

Not regulated.

Explosives Control Act

Not applicable.

High Pressure Gas Safety Act

Not applicable.

Act on Prevention of Marine Pollution and Maritime Disaster

Not applicable.

16. Other information

Bibliography

HSDB® - Hazardous Substances Data Bank
IARC Monographs. Overall Evaluation of Carcinogenicity
National Toxicology Program (NTP) Report on Carcinogens
ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices
Japan Society for Occupational Health, Recommendation of Occupational Exposure Limits
JIS Z 7252:2014 Classification of chemicals based on "Globally Harmonized System of Classification and Labelling of Chemicals (GHS)"
JIS Z 7253:2012 Hazard communication of chemicals based on GHS – Labelling and Safety Data Sheet (SDS)
Japan Chemical Industry Association (JCIA) GHS Guideline, June 2012

The aerosol of this product may be highly toxic by inhalation. In case of aerosol application of this product, exposure controls such as ventilation and/or respiratory protection are required. Do not use in consumer products with spray application.

This safety data sheet was prepared in accordance with JIS Z 7253:2012. This information is offered in good faith as typical values and not as a product specification. No warranty, expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.

This product has been designed, manufactured and developed solely for general industrial use only. This product is not designed for, intended for use as, or suitable for, medical, surgical or other particular purposes. Users have the sole responsibility and obligation to determine the suitability of this product for any application, to make preliminary tests, and to confirm the safety of this product for their use. Users must never use this product for the purpose of implantation into the human body and/or injection into humans.

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