

Weiss Bonya

Gemini[®]

High-Low Boiler PFPE Heat Transfer Fluids

Material Safety Data Sheet

1. CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Product Name

“Gemini” High-Low Boiler PFPE Heat Transfer Fluids

Tradenames and Synonyms

“Gemini” HB-93/94/95/96

“Gemini” LB-88/89/90/91/92

Identified use

Scientific research and development of Lubricant

Company Identification

HUNAN WEISS BONYA CO.,LTD

Add:No.10,Wangchengpo,Yuelu district,Changsha,Hunan,China

Email: weissbonya@gmail.com

Web:http://www.weissbonya.com

Phone Number

Emergency phone No. 24 hours :+ 86-731-84225539

2. HAZARDS IDENTIFICATION

Classification according to Regulation 29CFR 1910 1200

Not a hazardous substance

GHS Label elements, including precautionary statements

Pictogram

None Required

Symbol

None Required

Signal word

None Required Not Hazardous

Emergency Overview

The thermal decomposition vapours of fluorinated polymers may cause polymer fume fever with flu-like symptoms in humans, especially when smoking contaminated tobacco. Repeated episodes of polymer fume fever may result in persistent lung effects.

Potential Health Effects

Skin : May cause: slight irritation, Redness.

Eyes : May cause eye irritation. Discomfort, tearing, Blurred vision.

Carcinogenicity

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Material	CAS-NO.	Concentration
Perfluoropolyether	69991-67-9	100%

Any unidentified components and/or concentrations (exact percentages) are considered trade secrets.

4. FIRST AID MEASURES

First Aid

INGESTION

If swallowed, wash out mouth with copious amounts of water provided person is conscious, call a physician.

INHALATION

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

SKIN CONTACT

In case of contact, immediately wash skin with soap and water. Wash contaminated clothing before reuse.

EYE CONTACT

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

GENERAL ADVICE

When symptoms persist or in all cases of doubt seek medical advice.

5. FIRE FIGHTING MEASURES

Flash Point

Method : Pensky-Martens closed cup - PMCC does not flash

Thermal decomposition

350 °C (662 °F)

Fire and Explosion Hazard

In fire conditions, toxic decomposition products may be formed. (see also section 10)

Extinguishing Media

Carbon dioxide, dry chemical powder, foam. Use water spray to cool containers.

Fire Fighting Instructions

Wear self-contained breathing apparatus (SCBA). Wear suitable protective equipment.

Standard procedure for chemical fires.

6. ACCIDENTAL RELEASE MEASURES

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with cleanup.

Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Safeguards (Personnel)

Refer to protective measures listed in sections 7 and 8.

Environmental Precautions

Do not discharge into drains or rivers.

Spill Clean Up

Soak up with sawdust, sand, oil dry or other absorbent material. Shovel or sweep up.

Accidental Release Measures

Place in container for disposal . Remove source of heat and flame.

7. HANDLING AND STORAGE

Handling (Personnel)

Avoid breathing vapors from overheated material. Do not store or consume

food, drink or tobacco in areas where they may become contaminated with this material.

General industrial hygiene practice.

Storage

No special storage conditions required. Keep container closed to prevent contamination.

No decomposition if stored and applied as directed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls

Keep container tightly closed.

Use ventilation when the oil is heated above 260° C (500° F), local ventilation should be used to avoid exposure to fumes.

Personal Protective Equipment

Respiratory protection

No personal respiratory protective equipment normally required. In the case of hazardous fumes caused by overheating, wear self-contained breathing apparatus.

Hand protection

Additional protection: No particular glove type is recommended, but nitrile may used.

Eye protection

Safety glasses.

Skin protection

No PPE is specified however, avoid contact with skin, eyes, and clothing.
Preventive skin protection

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Data

Solubility in water: Insoluble

PH: Neutral

Odor: Odorless

Form: Viscous, Liquid

Colour: Colourless

Specific Gravity: 1.71-1.85g/cm³ (25 °C)

Pour Point: -100 to -70 °C

10. STABILITY AND REACTIVITY

Stability

Stable under recommended storage conditions.

Conditions to avoid

Decomposition temperature 350 °C (662 °F)

Hazardous decomposition

Hazardous thermal decomposition products: Fluorinated compounds products.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Perfluoropolyether

Oral, LD50 : > 11,000 mg/kg, rat

Inhalation, LC50, 4 hrs, dust/vapor , rat : No potential effects observed

Skin Contact, LD50 : > 17,000 mg/kg, rabbit

Skin irritation : slight irritation, rabbit

Eye irritation : slight irritation, rabbit

Skin sensitization : Patch test on human volunteers did not demonstrate sensitization properties., human

Further information : The substance is a polymer and is not expected to produce toxic effects.

12. ECOLOGICAL INFORMATION

Aquatic Toxicity

96 hrs, LC50

Oncorhynchus mykiss (rainbow trout) > 1,000 mg/l

The substance is a polymer and is not expected to produce toxic effects.

72 hrs, ErC50

(green algae) > 1,000 mg/l

72 hrs, NOEC

(green algae) > 1,000 mg/l

48 hrs EC50

Daphnia magna (Water flea) > 100 mg/l

13. DISPOSAL CONSIDERATIONS

Waste Disposal

Treatment ,storage,transportation,and disposal must be in accordance with local, state and federal regulations.

Environmental Hazards

Dispose of container properly. If recycling is not practicable, dispose of in compliance with local regulations.

14. TRANSPORTATION INFORMATION

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Packing group : None

Environmental hazards : None

Marine pollutant : None

US regulation

49 CFR

Not regulated as a dangerous good

15. REGULATORY INFORMATION

IECSC: On the inventory, and in compliance with the CN regulations

EINECS: On the inventory, and in compliance with the EU regulations

ENCS: On the inventory, and in compliance with the JP regulations

KECI: On the inventory, and in compliance with the KR regulations

EPCRA: Emergency Planning and Community Right-to-Know

TSCA: On the inventory, and in compliance with the US regulations

AICS: On the inventory, and in compliance with the AU regulations

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does NOT contain any components with a section 304 EHS RQ

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does NOT contain any components with a section 302 EHS TPQ

SARA 311/312 Hazards: NO SARA Hazards

SARA 313: This material does NOT contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313

CERCLA Reportable Quantity : This material does NOT contain any components with a CERCLA RQ

16. OTHER INFORMATION

NFPA/HMIS Rating: Health: 0 Flammability: 0 Reactivity 0

REFERENCE: Globally Harmonized System of classification and labelling of chemicals, (5th ed., 2013), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 19th edit., 2015 UN Classification, labelling and packaging of substances and mixtures (table3-1 ECNO6182012), GHS Classification Guidance for Enterprises 2013 Revised Edition.

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