

Safety Data Sheet

1. Product and Company information

Product Name:	H1 Bell Hammer Cartridge Grease No. 2, 420 ml
Company Name:	SUZUKI KIKOH Co., Ltd.
Address:	316-3, Matsuhidai, Matsudo, Chiba,270-2214
Department:	Quality Assurance Department
Phone:	047-385-5311
Fax:	047-385-5313
Reference Number:	231044-GJ19
Recommended uses and restrictions on use:	Industrial lubricant

2. Summary of potential hazards

GHS classification(JIS Z 7252-2019)

Hazards to human health:	When heated to over 300° C or heated for a prolonged period at over 260° C, fine particulate matter considered to be a cause of polymer fume fever may be generated. Harmful decomposition products may be released around 400° C.
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Environmental Hazards

Hazardous to the aquatic environment - Acute:	Category 3
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Hazardous to the aquatic environment - Chronic:	Category 3
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Other hazards:	Not classified or classification not possible
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GHS Label Elements:

Pictogram (symbol):	None
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Signal words:	None
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Hazard statement:	Toxic to aquatic life with long lasting effects
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Precautionary Statements:

【Safety Measures】:	Avoid release to the environment
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【First Aid Measures】:	No precautionary statement required under GHS classification
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【Storage】:	No precautionary statement required under GHS classification
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【Disposal】:	When disposing of the contents or container, entrust the task to a licensed waste disposal contractor in accordance with applicable laws and municipal regulations.
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Others:	Refer to the information in this SDS and take appropriate precautions regarding safety measures, first-aid, storage, and disposal.
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3. Composition and ingredient information

Product Type:	Mixture
Chemical or Common Name:	Lubricating Oil
Ingredients and composition:	Base oil (lubricant), thickening agent, polytetrafluoroethylene (PTFE) (5-10%), zinc oxide (0.5-5%), 2,6-di-tert-butyl-4-methylphenol (BHT) (0.1-0.6%), additives
Chemical Substances:	Zinc oxide: ZnO 2,6-di-tert-butyl-4-methylphenol: $C(CH_3)_2C_6H_2(OH)(CH_3)$ Others: Not disclosed
(Chemical Substance Control Law, Industrial Safety and Health Act)	
	Zinc oxide: (1-561) • 2,6-di-tert-butyl-4-methylphenol: (3-540) Others: Not disclosed
CASNo.	Polytetrafluoroethylene (PTFE): 9002-84-0 Zinc oxide: 1314-13-2 2,6-di-tert-butyl-4-methylphenol: 128-37-0 Others: Not disclosed

4. First-aid treatment

If inhaled:	If fumes or decomposition gases generated by heating or combustion are inhaled, move the person to clean air and seek medical attention immediately. Move the victim to fresh air and keep them at rest in a position comfortable for breathing.
If in contact with skin:	If skin irritation or rash occurs, seek medical advice/attention. Wipe off with cloth or paper, then wash the affected area thoroughly with soap and water.
If in eyes:	Rinse cautiously with water for several minutes. If wearing contact lenses and they are easy to remove, remove them and continue rinsing.
If swallowed:	Do not induce vomiting. If mouth is contaminated, rinse thoroughly with water. Seek medical attention if feeling unwell.
Special instructions for physicians:	Inhalation of fumes generated by heating or combustion may cause temporary flu-like symptoms, referred to as "polymer fume fever." Symptoms include headache, joint pain, general malaise, fever, cough, chills, palpitations, and chest discomfort. These symptoms typically appear after a few hours of latency and may last up to 48 hours without lasting aftereffects. Individuals with a history of pulmonary disease may experience more severe toxic effects from overexposure to thermal decomposition products.

5. Firefighting measures

Extinguishing Agents:	Fine spray, foam, powder, carbon dioxide
Unsuitable Extinguishing Agents:	Water sprays or pouring water may spread the fire.
Specific hazards in case of fire:	Toxic gases such as carbon monoxide, phosphorus compounds, sulfur oxides, and hydrogen chloride.
Specific firefighting method:	For initial fires, use powder or carbon dioxide extinguishers. For large-scale fires, use foam extinguishers or fine spray agents.

6. Accidental release measures

Personal Protection:	Wear appropriate protective gear. Set up barriers to prevent unauthorized entry to the affected area.
Environmental Precautions:	Ensure that spilled product does not enter waterways. In case of release, notify the appropriate authorities.
Cleaning Methods:	Recover as much of the material as possible using a spatula or similar tool into a tightly sealable empty container. Wipe off any remaining residue with a cloth or equivalent.
Secondary Disaster Prevention:	Remove any nearby fire sources and prepare firefighting equipment.

7. Handling and Storage

Handling

Technical measures	• Wear appropriate protective equipment such as safety glasses and gloves, and avoid direct contact. • Smoking is prohibited in handling areas. (Smoking tobacco contaminated with PTFE may result in inhalation of decomposition gases.) • PTFE is stable under normal conditions, but begins to decompose very slowly above 260° C, releasing decomposition gases. If used above 260° C, install local exhaust ventilation.
Precautions for safe handling	• Obtain the SDS/Instruction manual before use. • Do not handle the product until all safety precautions are read and understood. • Ensure adequate ventilation in the workspace. • Avoid generating steam or mist unnecessarily • Do not inhale mist • Wash hands thoroughly after handling • Do not eat, drink, or smoke while handling this product • If the product comes into contact with clothing, remove the contaminated clothing and wash it before reuse • No open flames allowed

Storage

- Suitable storage conditions
- Store away from heat, sparks, and open flames
 - Avoid storing together with metal powders, halogens, strong acids, alkalis, or oxidizing agents
 - Do not transfer to containers with different product names or GHS labels, or to unlabeled containers.
 - Seal the container tightly after use.
 - Store in a cool, dark place away from direct sunlight.
 - Ensure good ventilation and prevent vapor accumulation.
 - Store separately from incompatible materials (e.g., strong oxidizing agents).
 - No open flames allowed.
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8. Exposure prevention and protection measures

- Equipment and facilities
- If steam or mist is generated, enclose the source or install a local exhaust ventilation system.
 - Use explosion-proof electrical equipment.
 - Prevent the substance from adhering to equipment that may be heated above 260° C by implementing proper management.
 - Install eye-wash stations and body-wash facilities near the handling area.
- Exposure Limits:
- Not set or Not specified.
(Occupational Safety Standards: Labor Ministry Notice No. 26, March 27, 1995)
- Permissible Concentration
- Japan Society for Occupational Health (2024)
- 3 mg/m³ (as mineral oil mist)
- Zinc oxide (as dust, Category 2 dust): Inhalable dust 1 mg/m³, total dust 4 mg/m³
- ACGIH(2024)
- TWA (Time-Weighted Average): 5 mg/m³ (as mineral oil mist)
- STEL (Short-Term Exposure Limit): 10 mg/m³ (zinc oxide fume)
- TWA: 2 mg/m³ (zinc oxide fume)
- TWA: 2 mg/m³ (2,6-di-tert-butyl-4-methylphenol)

Protective Equipment	
Respiratory Protection	• Not required under normal handling conditions. • If vapors or mist are generated, wear an organic vapor respirator. • If there is a possibility of combustion or exposure to temperatures exceeding 260° C, wear a self-contained breathing apparatus.
Hand Protection:	Hand Protection: Oil-resistant gloves
Eye Protection:	Eye Protection: Regular protective glasses
Skin and Body Protection:	If there is a possibility of contact, wear oil-resistant long-sleeve work clothing.

9. Physical and chemical properties

Physical State	
State:	Paste
Color:	White
Odor:	Mild
Specific temperatures / temperature ranges at which physical state changes	
Boiling Point:	Data not available
Melting point:	Above 150° C (Drop point according to JIS K2220-5.4)
Decomposition temperature:	PTFE decomposes at temperatures above 260° C; data for other components is not available.
Flash point:	Above 200° C
Auto-ignition temperature:	Data not available
Explosion limits:	Lower limit: 1% (estimated for mineral oil) Upper limit: 7% (estimated for mineral oil)
Vapor Pressure:	Extremely low
Density:	0.9-1.1 g/cm ³ (@ 20° C)
Solubility:	Insoluble in water. Soluble in benzene, toluene, and petroleum-based solvents.

10. Stability and reactivity

Stability	• Stable at room temperature • PTFE begins to decompose above 260° C. The rate of decomposition increases significantly above 400° C.
Reactivity:	No reactivity with water
Conditions to avoid:	Contact with incompatible materials.
Incompatible materials:	Strong oxidizing agents.
Hazardous decomposition products:	When heated above the melting point of PTFE (300-340° C) or for prolonged periods above 260° C, particulate matter that may cause polymer fume fever is generated. Around 400° C, trace amounts of hydrogen fluoride and carbonyl fluoride may be released. At even higher temperatures, larger quantities of these gases may be emitted.

11. Hazard information

Acute Toxicity (Oral):	Unable to classify due to insufficient data.
Acute Toxicity (Skin):	Unable to classify due to insufficient data.
Acute Toxicity (Inhalation – Mist):	Unable to classify due to insufficient data.
Skin Corrosion/Irritation:	Unable to classify due to insufficient data.
Serious Eye Damage/Eye Irritation:	Unable to classify due to insufficient data.
Respiratory Sensitization:	Unable to classify due to insufficient data.
Skin sensitization:	Unable to classify due to insufficient data.
Germ Cell Mutagenicity:	Unable to classify due to insufficient data.
Carcinogenicity:	Unable to classify due to insufficient data.
Reproductive Toxicity:	Unable to classify due to insufficient data.

Specific Target Organ Toxicity (Single Exposure):	Unable to classify due to insufficient data.
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Specific Target Organ Toxicity (repeated exposure):	Unable to classify due to insufficient data.
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Aspiration Hazard:	Unable to classify due to insufficient data.
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※ The above classification is based on the "Classification Method for Chemicals and Chemical Products in accordance with GHS" (JIS Z7252-2019).

Others:

When heated above 300° C or for prolonged periods above 260° C, harmful fumes may be generated.

Inhalation of these fumes may cause flu-like symptoms known as "polymer fume fever," characterized by headache, joint pain, general malaise, fever, cough, chills, palpitations, and chest discomfort. These symptoms typically resolve without aftereffects.

Exposure to hydrogen fluoride, which may be generated at temperatures above approximately 400° C, can initially cause shortness of breath, coughing, and severe irritation to the eyes, nose, and throat, followed by fever and chills lasting 1-2 days. In more severe cases, it may lead to dyspnea, cyanosis, and pulmonary edema.

Short- or long-term exposure to high concentrations can result in liver and kidney damage.

Carbonyl fluoride, also produced around 400° C, may cause skin irritation and rash.

Eye exposure may result in corneal or conjunctival ulcers.

Inhalation may cause temporary irritation to the respiratory tract, including coughing, discomfort, breathing difficulty, or shortness of breath.

12. Ecological Information

Aquatic Acute Toxicity:□	Based on additive method and summation formulas, classified as Category 3. Note: Contains 30% of components for which aquatic environmental hazards are unknown.
Aquatic Chronic Toxicity:	Based on additive method and summation formulas, classified as Category 3. Note: Contains 30% of components for which aquatic environmental hazards are
Ozone Layer Impact:	None of the components are listed in the Montreal Protocol.
※ The above classification is based on the "Classification Method for Chemicals and Chemical Products in accordance with GHS" (JIS Z7252-2019).	
Persistence and degradability:	Expected to have low biodegradability.
Bioaccumulative potential:	No data available.
Mobility in soil:	May migrate into soil if released into the environment.

13. Disposal considerations

Prohibited disposal: Dispose of properly in accordance with the "Waste Management and Public Cleansing Act."

When disposing of contents or containers, entrust the task to a licensed specialized waste disposal contractor in accordance with laws and local government ordinances.

When disposing of empty containers, completely remove the contents and either recycle or dispose of them properly according to relevant regulations and local government standards.

14. Transport precautions

UN Classification:	Not classified as hazardous material under UN recommendations.
UN Number:	Not applicable.
Domestic Regulations	
Fire Service Act:	Not classified as hazardous material.
Marine and air transport:	Not classified as dangerous goods.

15. Applicable Laws and Regulations

Fire Service Act: Not applicable

The Poisonous and Deleterious Substances Business Control Act

- Not applicable

Occupational Safety and Health Act – Substance Labeling (Compliant with the revised ordinance effective April 1, 2024)

Designated Chemical Substances (Article 57 of the Industrial Safety and Health Act)

- Applicable (contains 0.5-5% zinc oxide)

Substances Requiring Notification (Article 57-2 of the Industrial Safety and Health Act)

- Applicable (contains 0.5-5% zinc oxide and 0.1-0.6% 2,6-di-tert-butyl-4-methylphenol [BHT])

Substance Subject to Risk Assessment (Article 57-3 of the Industrial Safety and Health Act)

- Applicable (contains 0.5-5% zinc oxide)

Substance Requiring 30-Year Record Retention (Article 57-2 of the Industrial Safety and Health Act)

- Not applicable

Pollutant Release and Transfer Register (PRTR) Law - Class I and II Designated Chemical Substances

- Not applicable

Water Pollution Control Act: Regulated for oil discharge (permissible concentration: 5 mg/L, as n-hexane extractable)

Marine Pollution Prevention Act: Oil discharge regulated (discharge generally prohibited)

Sewerage Act: Regulated for discharge of mineral oils (5 mg/L)

Waste Management and Public Cleansing Act: Regulated as industrial waste (prohibition on diffusion and leakage)

16. Other Information

References:

1. Recommended Occupational Exposure Limit - Japan Society for Occupational Health (2022)
2. Threshold Limit Values (TLVs) and Biological Exposure Indices (BEIs) - American Conference of Governmental Industrial Hygienists (ACGIH) (2012)
3. International Uniform Chemical Information Database (IUCLID) (2000)
4. IARC Supplement 7 (1987)
5. IARC Monographs Programme on the Evaluation of Carcinogenic Risks to Humans (2006)
6. EC Council Directive [67/548/EEC], Annex I: "List of Dangerous Substances"
7. ACGIH Documentation of the TLVs and BEIs (2006)
8. WHO/IPCS: "Environmental Health Criteria (EHC)" (1982)
9. WHO/IPCS: International Chemical Safety Cards (ICSC) (2001)
10. Chemical Substance Classification Based on GHS - JIS Z 7252:2019

Handling of the Described Contents

The contents of this document are based on our company's best knowledge, but we do not guarantee the accuracy or completeness of the information. This information may be revised based on new findings and tests.

Since all chemicals may have unknown hazards, it is essential to handle them with utmost care. It is the responsibility of the users to establish safe usage conditions.

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