



MATERIAL SAFETY DATA SHEET

CONFORMS TO DIRECTIVE 2001/58/EC AMENDING DIRECTIVE 91/155/EEC

Section 1. Identification of the Company and the Preparation

| | | | |
|---------------------|---|------------------------|------------------------------------|
| Product Name | JAX HALO-GUARD FG-2 JAX HALO-GUARD FG-LT JAX HALO-GUARD FG-00 | Revision Date | 10/3/2008 |
| | | Supersedes Date | 2/11/2008 |
| Supplier | BEHNKE LUBRICANTS INC. W134 N5373 CAMPBELL DRIVE MENOMONEE FALLS, WI 53051 USA | Product No. | HLG02; HLGLT; HLGLTN; HLG00 |
| | | Material Use | Lubricant |

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In Case of Emergency CHEMTREC: 1-800-424-9300 (North America) +01-703-527-3887 Collect (International)

Section 2. Composition / Information on Ingredients

This preparation is classified as dangerous according to Directive 1999/45/EC and its amendments.

Components listed below either meet the reporting requirements as specified in U.S. 29 CFR 1910.1200 or EU Directive 1999/45/EC as amended, or are reported for informational purposes only.

| Ingredient* | % | PEL/TLV, Source | CAS # | EINECS # | EU Hazard Symbol | R-Phrases** |
|--------------------|----------|-----------------------------------|--------------|-----------------|-------------------------|--------------------|
| Zinc oxide | 5-10 | 5 mg/m ³ (fumes), OSHA | 1314-13-2 | 215-222-5 | N | R50/53 |

*See Section 11 for LD₅₀ and LC₅₀ of ingredients.

**See Section 16 for full text of R-Phrases.

Section 3. Hazards Identification

| | |
|--------------------------------|---|
| Physicochemical Hazards | Not physicochemically hazardous per EU Directive 1999/45/EC definitions. |
| Human Health Hazards | See Section 11. |
| Environmental Hazards | Toxic to aquatic organisms, may cause long-term adverse effects in the environment. |

Section 4. First Aid Measures

| | |
|---------------------|---|
| Eye Contact | Remove contact lenses, if wearing. Immediately flush eyes with water for at least 15 minutes. Obtain medical attention immediately. |
| Skin Contact | Remove clothing and shoes, if contaminated. Wash skin thoroughly with soap and warm water. Wash or clean contaminated clothing before reuse and discard oil-soaked shoes. If hot material contacts skin, immediately cool before attempting removal. If irritation persists or contact has been prolonged, obtain medical attention. If high pressure forces the product under the skin, get immediate medical attention! |
| Ingestion | Obtain medical attention. If swallowed, DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Not expected to be toxic by ingestion. |
| Inhalation | Remove to fresh air. Aspiration may cause pulmonary edema or aspiration pneumonia. If breathing is difficult, oxygen may be given by qualified personnel. Obtain medical attention if symptoms persist. |

Section 5. Firefighting Measures

| | | | |
|---------------------------------------|--|--------------------------------------|-----|
| Flash Point | 350°F (177°C), ASTM D 92 | Autoignition Temperature | N/A |
| Sensitive to Mechanical Impact | No | Sensitive to Static Discharge | No |
| Lower Flammability Limit | N/A | Upper Flammability Limit | N/A |
| Extinguishing Media | Suitable extinguishing media: CO ₂ (carbon dioxide), dry powder, foam, water fog Unsuitable extinguishing media: Water spray | | |

| | |
|--|---|
| Special Hazards | Do not discharge extinguishing waters into streams, rivers or lakes. |
| Products of Combustion | Carbon monoxide, carbon dioxide, oxides of nitrogen, smoke and irritating vapors as products of incomplete combustion. |
| Special Protective Equipment for Firefighters | Firefighters should wear body-covering protective clothing, full "turn-out" gear, and self-contained breathing apparatus. |

Section 6. Accidental Release Measures

| | |
|-----------------------------|--|
| Personal Precautions | Extinguish all sources of ignition. Provide sufficient ventilation and/or respiratory protection. Wear appropriate protective clothing, gloves, face mask, goggles/glasses to prevent contact with the eyes and skin. See Section 8. |
|-----------------------------|--|

Environmental Precautions Keep product out of sewers and watercourses by diking or impounding. Advise authorities if the product has entered or may enter sewers, watercourses, or extensive land areas.

Methods for Clean-Up Recover free product using non-sparking tools. Add sand, earth, or other suitable absorbent material to the spill area. Dispose of in accordance with national and/or local regulations relating to waste disposal.

Section 7. Handling and Storage

Handling Keep away from heat, sparks, open flame or where temperature may exceed 49°C (120°F). Do not throw empty container into fire or trash compactor. Container is not designed to contain pressure; do not use pressure to empty container or it may rupture with explosive force. "Empty" containers retain product residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, or grind such containers as they may explode and can cause injury or death. Use only with adequate ventilation. Do not breathe vapor or mist. Do not take internally. Do not get in eyes, on skin or on clothing. Wash thoroughly after handling. Do not transfer to nor store in an unmarked container. Read label and MSDS before using. Do not smoke when handling or using this product. Do not use in high-pressure systems in the vicinity of flames, sparks and hot surfaces. Empty container should be promptly returned to a drum reconditioner. If high pressure forces the product under the skin, get immediate medical attention! For industrial use only.

Storage Store in tightly sealed containers. Store in a cool, dry place out of direct sunlight. Do not store near heat, sparks, open flame, pilot lights, static electricity, or where temperature may exceed 49°C (120°F). Rotate stock.

Section 8. Exposure Controls / Personal Protection

Occupational Exposure Limit 5 mg/m³ (oil mist) OSHA, for total product; see Section 2 for component exposure limit(s).

Respiratory Protection Use with adequate ventilation. In case of occurrence of dust, respiratory protective equipment is required.

Ventilation Use in a well-ventilated area. Local exhaust suggested to prevent dust build-up. See Engineering Controls.

Protective Gloves Wear chemical-resistant protective gloves.

Eye Protection Chemical splash goggles or face shield are advised when eye contact may occur.

Personal Hygiene Wash skin thoroughly after contact, before breaks and meals and at the end of work period. Wear protective clothing, such as long sleeves, to minimize skin contact.

Engineering Controls Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits and to prevent dust build-up.

Section 9. Physical and Chemical Properties

| | | | |
|---|---|----------------------------|---|
| Appearance/Odor | Cream-colored semi-solid with mild petroleum odor | Vapor Pressure | N/A |
| pH | N/A | Solubility in Water | Negligible |
| Boiling Point | N/A | Density | North America: 0.95 - 1.05 g/cm ³ @ 20°C European Union: 0,95 - 1,05 g/cm ³ @ 20°C |
| Oxidizing Properties | Not an oxidizer | Viscosity | N/A |
| Percent Volatile | N/A | Vapor Density | N/A |
| Coefficient of Water/Oil Distribution | N/A | Evaporation Rate | N/A |
| Partition Coefficient: n-octanol/water | N/A | Physical State | Semi-solid |

Section 10. Stability and Reactivity

Conditions and Materials to Avoid Avoid heat, open flames, strong acids, strong bases, and oxidizing agents.

Hazardous Polymerization Hazardous polymerization will not occur.

Hazardous Decomposition Products Carbon monoxide, carbon dioxide, oxides of nitrogen, smoke and irritating vapors as products of incomplete combustion.

Section 11. Toxicological Information

Routes of Entry Skin contact, eye contact, ingestion and inhalation.

Skin May cause slight redness or irritation.

Eye May cause slight irritation and redness.

Ingestion Not expected to be toxic by ingestion.

Inhalation Aspiration may cause pulmonary edema or aspiration pneumonia.

**Acute Toxicity /
 LD₅₀ and LC₅₀ of
 Ingredients**

| Ingredient | LD ₅₀ | LC ₅₀ |
|------------|------------------------|------------------------------|
| Zinc oxide | Oral/Rat > 15000 mg/kg | Inhalation/Rat > 5.7 mg/l/4h |

**Chronic Toxicity /
 Carcinogenicity**

| Ingredient | CAS # | NTP Known Carcinogen | NTP Anticipated Carcinogen | IARC Group |
|------------|-----------|----------------------|----------------------------|------------|
| Zinc oxide | 1314-13-2 | No | No | No |

Section 12. Ecological Information

| | | | |
|--------------------|-----|--------------------------------------|-----|
| Ecotoxicity | N/A | Bioaccumulative Potential | N/A |
| Mobility | N/A | Persistence and Degradability | N/A |

Section 13. Disposal Considerations

Waste Disposal Consult national or regional authorities for proper disposal and reporting procedures. All disposals must comply with national and regional regulations.

Section 14. Transportation Information

Dangerous goods descriptions may not reflect package size, quantity, end-use or region-specific exceptions that can be applied to shipments. Consult shipping documents for material-specific descriptions.

U.S. D.O.T.

Proper Shipping Name: Not regulated
UN Number: None
Hazard Class: None
Packing Group: None
Remarks None

Land Transport ADR/RID

Proper Shipping Name Environmentally hazardous substance, solid, n.o.s.
UN Number 3077
Hazard Class 9
Packing Group III

Maritime Transport IMDG

Proper Shipping Name Environmentally hazardous substance, solid, n.o.s.
IM Number 3077
IMDG Code 9
Packing Group III

Air Transport IATA

Proper Shipping Name Environmentally hazardous substance, solid, n.o.s.
UN Number 3077
Hazard Class 9
Packing Group None
Remarks III

Section 15. Regulatory Information

U.S. Federal Regulations

CERCLA Release of the following chemical(s) at quantities equal to or greater than the reportable quantities (RQ), is regulated by 40 CFR 302.4 :
 None

SARA (Section 313) This product contains the following chemical(s) listed in Section 313 at or above the de minimis concentrations:
 Zinc oxide, CAS # 1314-13-2, present at 5-10%

SARA Extremely Hazardous List This product contains greater than 1.0% of the following chemical(s) on the SARA Extremely Hazardous Substances List:
 None

TSCA Inventory All components of this material are on the U.S. TSCA Inventory.

State Regulations

California Prop. 65

This product contains the following chemical(s) known to the State of California to cause birth defects or other reproductive harm:
None

European Community Regulations

The content and format of this Material Safety Data Sheet are in accordance with Commission Directive 2001/58/EC, amending for the second time Commission Directive 91/155/EEC.

European Community Label Requirements

Danger Symbol(s)

N



S-Phrase(s)

S23: Do not breathe gas/fumes/vapor/spray
S24/25: Avoid contact with skin and eyes
S60: This material and its container must be disposed of as hazardous waste
S61: Avoid release to the environment. Refer to special instructions/safety data sheet

R-Phrase(s)

R44: Risk of explosion if heated under confinement
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Canada

This product has been classified in accordance with the hazard criteria of the *Controlled Products Regulations (CPR)* and the MSDS contains all of the information required by the *CPR*.

Section 16. Other Information

Component R-Phrase(s)

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

HMIS® Ratings

Health: **1** Fire: **1** Physical Hazard: **0**
HMIS® Ratings: 0 = Minimal Hazard; 1 = Slight Hazard; 2 = Moderate Hazard; 3 = Serious Hazard; 4 = Severe Hazard

Abbreviations that May Be Used in this Document

N/A = Not available
N/E = Not established

Sections Revised

Section 1

Revision Date

10/3/2008

The information and recommendations contained herein are, to the best of Behnke Lubricant Inc.'s knowledge and belief, accurate and reliable as of the date issued. Behnke Lubricants Inc. makes no warranty or guarantee, expressed or implied, of their accuracy or reliability, and Behnke Lubricants Inc. shall not be liable for any loss or damage based up on the criteria supplied by the developers of these rating systems, together with Behnke Lubricants Inc.'s interpretation of the available data.

*** END OF MSDS ***



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