



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 PERMA-GEAR FG ISO 150, 220, 320, 460 & 680	Revision Date	12/18/2008
		Supersedes Date	5/19/2008
Supplier	BEHNKE LUBRICANTS INC. W134 N5373 CAMPBELL DRIVE MENOMONEE FALLS, WI 53051 USA	Product No.	PGFGM; PGFGN; PGFGP; PGFGQ; PGFGR
		Material Use	Lubricant
Non-Emergency Contact	Phone: 1-800-782-8850 (North America) +01-262-781-8850 (International) Fax: 1-262-781-3906 (North America) +01-262-781-3906 (International)		
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 not 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**
Polyalkylene glycol	0-97	N/E	9003-13-8	500-003-1	None	None
Polyalkylene glycol	0-97	N/E	9038-95-3	Not listed	None	None

*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	No data available

Section 4. First Aid Measures

Eye Contact	Immediately flush eyes with water and continue washing for several minutes. Remove contact lenses, if worn. Obtain medical attention.
Skin Contact	Wash skin with soap and water.
Ingestion	If the patient is fully conscious, give two glasses of water. DO NOT induce vomiting. If signs or symptoms of toxicity are present, obtain medical attention. NOTE TO PHYSICIAN: Low toxicity by swallowing. Any material aspirated during vomiting may cause lung injury. If it is considered necessary to evacuate the stomach contents, this should be done by means least likely to cause aspiration (e.g., gastric lavage after endotracheal intubation).
Inhalation	Remove to fresh air.

Section 5. Firefighting Measures

Flash Point	547°F (286°C) min., ASTM D 92	Autoignition Temperature	N/A
Sensitive to Mechanical Impact	No	Sensitive to Static Discharge	Not expected to be sensitive to static discharge
Lower Flammability Limit	N/A	Upper Flammability Limit	N/A
Extinguishing Media	MEDIA: Extinguish large fires with water spray or apply alcohol-type or all-purpose foam by manufacturer's recommended techniques. For small fires, use carbon dioxide or dry chemical media.		
Special Hazards	Pressure build-up due to heat exposure may cause containers to rupture. Use water spray to keep containers cool. If a leak or spill has not ignited, use water spray to disperse the vapors and to provide protection for the firefighters. Leaks/ruptures in high-pressure systems using materials of this type can create a fire hazard when in the vicinity of ignition sources (open flame, pilot lights, sparks or electric arcs). Do not direct a solid stream of water or foam into hot, burning pools; this may cause frothing and increase fire intensity.		
Products of Combustion	Carbon monoxide, carbon dioxide, smoke and irritating vapors as products of incomplete combustion.		
Special Protective Equipment for Firefighters	Firefighters should wear full protective clothing, including helmet, and NIOSH-approved self-contained breathing apparatus with full facepiece operated in pressure-demand or other positive-pressure mode.		

Section 6. Accidental Release Measures

Personal Precautions	Extinguish all sources of ignition. Provide sufficient ventilation and/or respiratory protection. Wear appropriate protective clothing,
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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. 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. Respiratory protective equipment is not normally required where there is adequate natural or local exhaust ventilation to control exposure. In case of insufficient ventilation, wear suitable respiratory equipment. A NIOSH/MSHA-approved air-supplied respirator is advised in absence of proper environmental control.

Ventilation General room ventilation is satisfactory for storage and handling at room temperature. Where exposure to elevated temperatures occur or when vapor or mist is created, local ventilation is needed.

Protective Gloves Use gloves coated with polyvinyl chloride (PVC).

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 end of work period. Product is readily removed from skin by waterless hand cleaners followed by washing thoroughly with soap and water.

Engineering Controls Sudden release of hot organic chemical vapor or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into hot equipment under a vacuum, may result in ignitions without the presence of obvious ignition sources. Any use of this product in elevated-temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions.

Section 9. Physical and Chemical Properties

Appearance/Odor	Amber viscous liquid with little or no odor	Vapor Pressure	Not available
		Solubility in Water	Not available
pH	Not available	Density	Not available
Boiling Point	Not available	Viscosity	Not available
Oxidizing Properties	Not an oxidizer	Vapor Density	Not available
Percent Volatile	Nil	Evaporation Rate	Not available
Coefficient of Water/Oil Distribution	N/A	Physical State	Liquid
Partition Coefficient: n-octanol/water	N/A		

Section 10. Stability and Reactivity

Conditions and Materials to Avoid This product is normally unreactive; however, avoid strong bases at high temperatures, strong acids, strong oxidizing agents and materials reactive with hydroxyl compounds.

Hazardous Polymerization Hazardous polymerization will not occur.

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

Section 11. Toxicological Information

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

Skin	SKIN CONTACT: Brief contact is not irritating. Prolonged or repeated contact may cause discomfort and local redness. Prolonged or repeated contact may cause defatting and drying of the skin.
	SKIN ABSORPTION: No evidence of harmful effects, based on available information.
Eye	Excess redness of the conjunctiva may occur. May cause irritation, experienced as stinging with excess blinking and tear production.
Ingestion	No evidence of harmful effects, based on available information.
Inhalation	Exposure to a dense atmosphere of aerosolized product, designed to evaluate intentional aerosolization, produced lung injury and delayed deaths in animals. Repeated inhalation of respirable aerosols may cause lung damage, which could impair lung function and the ability to obtain sufficient oxygen supply to the body. Overexposure to vapor, aerosol or mist generated at high temperature may result in eye and respiratory tract irritation, dizziness, nausea and the inhalation of harmful amounts of material.

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

Ingredient	LD₅₀	LC₅₀
Polyalkylene glycol	N/A	N/A
Polyalkylene glycol	N/A	N/A

**Chronic Toxicity /
Carcinogenicity**

Ingredient	CAS #	NTP Known Carcinogen	NTP Anticipated Carcinogen	IARC Group
Polyalkylene glycol	9003-13-8	No	No	No
Polyalkylene glycol	9038-95-3	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.
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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	Not regulated
UN Number	None
Hazard Class	None
Packing Group	None

Maritime Transport IMDG

Proper Shipping Name	Not regulated
IM Number	None
IMDG Code	None
Packing Group	None

Air Transport IATA

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



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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 : Propylene oxide, CAS #75-56-9, present at <=0.5000 ppm; Ethylene oxide, CAS #75-21-8, present at <=0.1000 ppm Ethylene glycol, CAS #107-21-1, present at <=0.1000 ppm
SARA (Section 313)	This product contains the following chemical(s) listed in Section 313 at or above the de minimis concentrations: None
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	WARNING! This product may contain the following chemical(s) known to the State of California to cause birth defects or other reproductive harm: Propylene oxide, CAS #75-56-9, present at <=0.5000 ppm; Ethylene oxide, CAS #75-21-8, present at <=0.1000 ppm Ethylene glycol, CAS #107-21-1, present at <=0.1000 ppm
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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)	None
S-Phrase(s)	Not classified according to EU Directive 99/45/EC
R-Phrase(s)	R44: Risk of explosion if heated under confinement

Canada	This product has been classified in accordance with the hazard criteria of the <i>Controlled Products Regulations (CPR)</i> and the MSDS contains all of the information required by the <i>CPR</i> .
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Section 16. Other Information

Component R-Phrase(s)	None
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 15
Revision Date	12/18/2008

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*** END OF MSDS ***



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