



# JAX INC.

Approval Date 2/9/2009  
 Supersedes Date 12/18/2008

## Material Safety Data Sheet

Section I. Chemical Product and Company Identification			
Product Name/ Trade Name	JAX PERMA-GEAR SYNTHETIC ISO 100, 150, 220, 320, 460, AND 680	Product ID No.	PMGRL; PMGRM; PMGRN; PMGRP; PMGRQ; PMGRR
Supplier	JAX INC. W134 N5373 CAMPBELL DRIVE MENOMONEE FALLS, WI 53051 USA	Emergency Contact  For Chemical Emergency, Spill, Leak, Fire, Exposure or Accident, Call CHEMTREC: NORTH AMERICA 800-424-9300 INTERNATIONAL +01-703-527-3887 Collect	
Synonym(s)	None		
Chemical Name	Polyalkylene glycol		
Chemical Family	Polyalkylene glycol	Non-Emergency Contact	JAX: 262-781-8850 JAX/FAX: 262-781-3906
Chemical Formula	Mixture		
Material Uses	Lubricant		

Section II. Composition and Information on Ingredients				
Name	PEL/TLV, Source	CAS #	% by Weight	
PROPRIETARY FORMULA. This material is essentially polyalkylene glycol fluid containing antiwear, corrosion & oxidation agents.	None established	Mixture	100.0	
All ingredients meet FDA 21 CFR 178.3570.				
LC <sub>50</sub> , LD <sub>50</sub> of Ingredients	Not available			

Section III. Hazards Identification	
<b>Emergency Overview</b>	Potential health risks vary from person to person. As a precaution, exposure to liquids, vapors, mists or fumes should be minimized.
<b>Potential Health Effects:</b>	
<b>Eye Contact</b>	Excess redness of the conjunctiva may occur. May cause irritation, experienced as stinging with excess blinking and tear production.
<b>Skin Contact</b>	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.
<b>Ingestion</b>	No evidence of harmful effects, based on available information.
<b>Inhalation</b>	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.

Continued on Next Page

**Section III. Hazards Identification (cont'd)**

HMIS Code	Health: <b>1</b>	Fire: <b>1</b>	Physical Hazard: <b>0</b>	<b>HAZARD RATINGS</b>	
				0 Minimal Hazard 1 Slight Hazard 2 Moderate Hazard	3 Serious Hazard 4 Severe Hazard

**Section IV. First Aid Measures**

<b>Eye Contact</b>	Immediately flush eyes with water and continue washing for several minutes. Remove contact lenses, if worn. Obtain medical attention.
<b>Skin Contact</b>	Wash skin with soap and water.
<b>Ingestion</b>	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).
<b>Inhalation</b>	Remove to fresh air.

**Section V. Fire and Explosion Data**

<b>Autoignition Temperature</b>	Not available	<b>Sensitivity to Impact</b>	Not available
<b>Flash Point</b>	355°F (179°C) min., ASTM D 92	<b>Sensitivity to Static Discharge</b>	Not available
<b>Flammable Limits (Approx.)</b>	<b>LOWER</b> Flammable Limit: Not available	<b>UPPER</b> Flammable Limit:	Not available
<b>Explosion Hazards</b>	See Lower and Upper Flammable Limits		
<b>Products of Combustion</b>	Carbon monoxide, carbon dioxide, smoke and irritating vapors as products of incomplete combustion.		
<b>Firefighting Media and Instructions</b>	<p><b>MEDIA:</b> 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.</p> <p><b>INSTRUCTIONS:</b> Firefighters should wear full protective gear, including helmet. Use supplied-air breathing equipment for enclosed or confined spaces or as otherwise needed.</p>		
<b>Special Remarks - Fire and Explosion Hazards</b>	Do not direct a solid stream of water or foam into hot, burning pools; this may cause frothing and increase fire intensity. Water may be used to keep fire-exposed containers cool until fire is out.		

**Section VI. Accidental Release Measures**

<b>Release or Spill</b>	Recover free product using non-sparking tools and equipment. Add sand, earth, or other suitable absorbent material to the spill area. Minimize breathing vapors. Minimize skin contact. Open all windows and doors. Keep product out of sewers and watercourses by diking or impounding. Advise authorities if the product has entered or may enter sewers, watercourse, or extensive land areas.
<b>Environmental Impact</b>	Report spills as required to the appropriate authorities. U.S Coast Guard Regulations require immediate reporting of spills that could reach any waterway including intermittent dry creeks. Report spill to the Coast Guard toll-free number 800-424-8802.

**Section VII. Handling and Storage**

<b>Handling</b>	Avoid contact with eyes, skin and clothing. Avoid breathing vapor, aerosol and mist. Do not swallow. Keep container closed. Use with adequate ventilation. Keep out of reach of children. "Empty" containers retain product residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. Empty container should be promptly returned to a drum conditioner.
-----------------	---

**Continued on Next Page**

**Section VII. Handling and Storage (cont'd)**

**Storage** Store in a cool, dry place. Do not store near heat, sparks, open flame, pilot lights and other sources of ignition, or where temperature may exceed 120°F (49°C). Do not store in direct sunlight. Keep out of reach of children.

**Section VIII. Exposure Controls and Personal Protection**

**Respiratory Protection** None required for vapors when used at low temperatures. For aerosols, vapors or mists, a negative-pressure, half-mask respirator approved for dust and mist protection is recommended.

**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 in compliance with OSHA regulations 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.

**Exposure Limit** None established.

**Section IX. Physical and Chemical Properties**

<b>Appearance/Odor</b>	Amber viscous liquid with little or no odor	<b>Vapor Pressure</b>	<0.01 mm Hg @ 20°C
<b>Odor Threshold</b>	Not available	<b>Vapor Density</b>	42.41 (air = 1)
<b>Specific Gravity</b>	1.0300 - 1.0800	<b>Percent Volatile</b>	Nil
<b>Density</b>	Not available	<b>Evaporation Rate</b>	<0.01 (butyl acetate = 1)
<b>Molecular Weight</b>	Not available	<b>Viscosity</b>	Not available
<b>pH</b>	Not available	<b>Solubility in Water</b>	100% @ 20°C
<b>Boiling Point</b>	Decomposes above 556°F (291°C)	<b>Coefficient of Water/Oil Distribution</b>	Not available
<b>Freezing/Melting Point</b>	Pour point -41°F (-41°C)	<b>Physical State</b>	Liquid

**Section X. Stability and Reactivity Data**

<b>Stability</b>	Stable under normal temperatures and pressures.	<b>Conditions of Reactivity</b>	Not available
<b>Conditions of Instability</b>	Not available		
<b>Conditions and Materials to Avoid</b>	This product is normally unreactive; however, avoid strong bases at high temperatures, strong acids, strong oxidizing agents and materials reactive with hydroxyl compounds.		
<b>Hazardous Polymerization</b>	Hazardous polymerization will not occur.		
<b>Hazardous Decomposition Products</b>	Carbon monoxide, carbon dioxide, smoke and irritating vapors as products of incomplete combustion.		

**Section XI. Toxicological Information**

<b>Routes of Entry</b>	Dermal contact, eye contact, inhalation, ingestion.	<b>Ingestion</b>	Not available
<b>Toxicity to Animals</b>	Not available	<b>Inhalation</b>	Not available
<b>Effects of Acute Exposure</b>	Not available	<b>Toxically Synergistic Products</b>	Not available
<b>Acute Effects of Sensitization</b>	Not available		
<b>Chronic Effects on Humans:</b>			
<b>Carcinogenic Effects</b>	This product does not contain a carcinogen or potential carcinogen as listed by NTP, IARC, or OSHA [29 CFR 1910.1200(D)#4].		
<b>Mutagenic Effects</b>	No data available to indicate any components present at greater than 0.1% may present a mutagenic hazard.		

Continued on Next Page

**Section XI. Toxicological Information (cont'd)**

<b>Teratogenic Effects</b>	No data available to indicate any components present at greater than 0.1% may present a teratogenic hazard.
<b>Reproductive Effects</b>	No data available to indicate any components present at greater than 0.1% may present a reproductive hazard.

**Section XII. Ecological Information**

<b>Ecotoxicity</b>	There is no data available on the adverse effects of this material on the environment.
--------------------	--

**Section XIII. Disposal Considerations**

<b>Waste Disposal</b>	Consult federal, state or local authorities for proper disposal and reporting procedures. All disposals must comply with federal, state and local regulations.
-----------------------	--

**Section XIV. Transportation Information**

<b>U.S. D.O.T.</b>			
<b>Shipping Name:</b>	Not regulated	<b>UN Number:</b>	None
<b>Hazard Class:</b>	None	<b>Packing Group:</b>	None
<b>Remarks</b>	It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of this material.		

**Section XV. Regulatory Information**

<b>U.S. Federal Regulations:</b>	
<b>CERCLA</b>	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
<b>SARA (Section 313)</b>	This product contains the following chemical(s) listed in Section 313 at or above the de minimis concentrations: None
<b>SARA Extremely Hazardous List</b>	This product contains greater than 1.0% of the following chemical(s) on the SARA Extremely Hazardous Substances List: None
<b>TSCA Inventory</b>	All components of this material are on the U.S. TSCA Inventory.
<b>California Prop. 65</b>	This product contains 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
<b>International Regulations:</b>	
<b>Canada</b>	All components are in compliance with the Canadian Environmental Protection Act. This product has been classified in accordance with the hazard criteria of the CPR and this MSDS contains all the information required by CPR.
<b>Japan MITI</b>	Not available
<b>Australia</b>	Not available
<b>Switzerland</b>	Not available

**Section XVI. Other Information**

<b>Approval Date</b>	<b>2/9/2009</b>
<b>Supersedes Date</b>	<b>12/18/2008</b>
<b>Prepared by</b>	Technical Services 262-781-8850
<b>Sections Revised Since Last Version</b>	Section I

The information and recommendations contained herein are, to the best of JAX INC.'s knowledge and belief, accurate and reliable as of the date issued. JAX INC. makes no warranty or guarantee, expressed or implied, of their accuracy or reliability, and JAX 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 JAX INC.'s interpretation of the available data.