



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 PYRO-KOTE 32
JAX PYRO-KOTE 68
JAX PYRO-KOTE 220

Revision Date 1/16/2009

Supersedes Date 6/19/2008

Supplier BEHNKE LUBRICANTS INC.
W134 N5373 CAMPBELL DRIVE
MENOMONEE FALLS, WI 53051 USA

Product No. 99032; 99068; 99220

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 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**
Tricresyl phosphate	<1	N/E	1330-78-5	215-548-8	Xn,N	R21/22-51/53

*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 This preparation is not expected to be dangerous to the environment.

Section 4. First Aid Measures

Eye Contact Remove contact lenses, if wearing. Flush eyes with large amounts of water, lifting lids to ensure thorough flushing. If irritation or other symptoms persist, call a physician.

Skin Contact Remove clothing and shoes, if contaminated. Wash skin with soap and water. Wash or clean contaminated clothing before reuse and discard oil-soaked shoes. If irritation persists, consult a physician.

Ingestion If swallowed, DO NOT induce vomiting. As a precaution, give the person a glass of water to drink and seek medical attention. Never give anything by mouth to an unconscious person. Consult a physician.

Inhalation If exposed to excessive levels of material in the air, move the exposed person to fresh air. If breathing is difficult, give oxygen; seek medical attention if respiratory difficulties continue. If not breathing, give artificial respiration and seek medical attention immediately.

Section 5. Firefighting Measures

Flash Point 550°F (287°C) min., 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 Extinguishing media include dry chemical, alcohol foam, and carbon dioxide-type extinguishing agents. Do not use direct stream of water. Water may be used to keep fire-exposed containers cool.

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).

Products of Combustion Carbon monoxide, carbon dioxide, oxides of phosphorus, 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, 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 Use in a well-ventilated area. See Engineering Controls.

Protective Gloves Any lined non-permeable rubber 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. Product is readily removed from skin by waterless hand cleaners followed by washing thoroughly with soap and water.

Engineering Controls Good general ventilation should be sufficient to control vapors under ambient conditions. Additional ventilation or exhaust may be required to maintain air concentrations below recommended exposure limits.

Section 9. Physical and Chemical Properties

Appearance/Odor	Clear to amber liquid, slightly viscous, with mild odor	Vapor Pressure	North America: <0.01 mm Hg @ 20°C European Union: <0,01 mm Hg @ 20°C
pH	N/A	Solubility in Water	Nil
Boiling Point	>650°F (343°C)	Density	N/A
Oxidizing Properties	Not an oxidizer	Viscosity	N/A
Percent Volatile	N/A	Vapor Density	Heavier than air
Coefficient of Water/Oil Distribution	N/A	Evaporation Rate	N/A
Partition Coefficient: n-octanol/water	N/A	Physical State	Liquid

Section 10. Stability and Reactivity

Conditions and Materials to Avoid Avoid heat, open flames and oxidizing materials.

Hazardous Polymerization Hazardous polymerization will not occur.

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

Section 11. Toxicological Information

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

Skin Prolonged or repeated contact can defat the skin and lead or irritation and/or dermatitis.

Eye May cause slight irritation and redness.

Ingestion Ingestion may cause irritation of the digestive tract. Aspiration into lungs can cause pneumonitis, which can be fatal.

Inhalation Vapor inhalation under ambient conditions is not normally a problem. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended oil mist exposure limit.

Acute Toxicity / LD₅₀ and LC₅₀ of Ingredients

Ingredient	LD ₅₀	LC ₅₀
Tricresyl phosphate	Oral/Rat = 3000 mg/kg	Inhalation/Rat > 5000 ppm/4h

Chronic Toxicity / Carcinogenicity

Ingredient	CAS #	NTP Known Carcinogen	NTP Anticipated Carcinogen	IARC Group
Tricresyl phosphate	1330-78-5	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 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 None



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: 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	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)	None
S-Phrase(s)	Not classified according to EU Directive 1999/45/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 *Controlled Products Regulations (CPR)* and the MSDS contains all of the information required by the *CPR*.

Section 16. Other Information

Component R-Phrase(s) R21/22: Harmful by inhalation and in contact with skin
R51/53: 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 Sections 1, 14, 15 and 16

Revision Date 1/16/2009

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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