



# JAX INC.

Approval Date 2/9/2009  
Supersedes Date 11/4/2008

## Material Safety Data Sheet

Section I. Chemical Product and Company Identification		
Product Name/ Trade Name	<b>JAX MAGNA-KOTE 412 PLUS</b>	Product ID No. <b>41201</b>
Supplier	<b>JAX INC. W134 N5373 CAMPBELL DRIVE MENOMONEE FALLS, WI 53051 USA</b>	<b>Emergency Telephone</b> 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	Lubricant	<b>Non-Emergency Contact</b> JAX: 262-781-8850 JAX/FAX: 262-781-3906
Chemical Family	Hydrocarbon	
Chemical Formula	Mixture	
Material Uses	Lubricant	

Section II. Composition and Information on Ingredients				
Name	PEL/TLV, Source	CAS #	% by Weight	
PROPRIETARY FORMULA.				
Aliphatic hydrocarbons (Stoddard type)	5 mg/m <sup>3</sup> (oil mist), OSHA	8052-41-3	90-95	
Molybdenum disulfide	10 mg/m <sup>3</sup> , OSHA	1317-33-5	1-5	
SHAKE WELL BEFORE USING!				
LC <sub>50</sub> , LD <sub>50</sub> of Ingredients	Not available			

Section III. Hazards Identification	
<b>Emergency Overview</b>	Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation of nose, throat and airways, central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness) and other central nervous system effects. Chronic exposure may lead to central nervous system complications, blood changes (aplastic anemia, a rare occurrence that is potentially fatal), and dermatitis. Animal studies have indicated the potential for liver and kidney damage. Pre-existing liver, kidney, heart, eye, skin or respiratory disorders may be aggravated by exposure.
<b>Potential Health Effects:</b>	
<b>Eye Contact</b>	May cause irritation and redness.
<b>Skin Contact</b>	Skin contact may cause mild to moderate irritation. Prolonged exposure may cause moderate irritation, defatting and dermatitis.
<b>Ingestion</b>	May be harmful if swallowed, causing headache, nausea, weakness, drowsiness, vomiting, dizziness, gastrointestinal irritation, central nervous system depression, convulsions and unconsciousness. May cause burning sensation in the mouth, esophagus and stomach. May cause kidney damage. Lung damage may occur if aspirated in the lungs and may be fatal.
<b>Inhalation</b>	Inhalation of the vapors of this product may cause irritation to the throat, mucous membranes and respiratory tract, headache, dizziness, nausea, difficulty breathing, drowsiness, wheezing, laryngitis, vomiting, muscle weakness, impairment of motor action, low blood pressure and chest pains. Prolonged inhalation may cause central nervous system depression, acute bronchitis, pneumonia, kidney damage, loss of appetite and nose bleeds.

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

HMIS Code	Health: <b>1</b>	Fire: <b>2</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>	Remove contact lenses, if wearing, and flush eyes gently with water while holding eyelids apart. If irritation persists or there is any visual difficulty, seek medical attention.
<b>Skin Contact</b>	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.
<b>Ingestion</b>	Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.
<b>Inhalation</b>	If exposed to excessive levels of material in the air, move the exposed person to fresh air. Seek medical attention if coughing or respiratory discomfort occurs. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

**Section V. Fire and Explosion Data**

<b>Autoignition Temperature</b>	Not available	<b>Sensitivity to Impact</b>	Not available
<b>Flash Point</b>	136°F (58°C), 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, oxides of sulfur, smoke and irritating vapors as products of incomplete combustion.		
<b>Fire Fighting Media and Instructions</b>	Foam, dry chemical and carbon dioxide may all be suitable for extinguishing fires involving this type of product, depending on the size or potential size of fire and circumstances related to the situation. Water may be used to keep fire-exposed containers cool until fire is out. Wear a self-contained breathing apparatus with a full facepiece operation in the positive-pressure demand mode with appropriate turn-out gear and chemical-resistant personal protective equipment.		
<b>Special Remarks - Fire and Explosion Hazards</b>	Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by heat, pilot lights, other flames and ignition sources at locations distant from material handling point. Never use welding or cutting torch on or near drum (even if empty) because product (even just residue) can ignite explosively. During a fire, irritating or toxic decomposition products may be generated.		

**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>	Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid and/or solid), all hazard precautions given in this MSDS must be observed. All five-gallon pails and larger metal containers, including tank card and tank trucks, should be grounded and/or bonded when material is transferred. Emergency eyewash fountains and safety showers should be available in the immediate vicinity of potential exposure. Hydrocarbon solvents are basically non-conductors of electricity and can become electrostatically charged during mixing, filtering or pumping at high flow rates. If this charge reaches a sufficiently high level, sparks can form that may ignite the vapors of flammable liquids. <b>WARNING:</b> Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without the presence of obvious ignition sources. Published "autoignition" or "ignition" temperature values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this product in elevated temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions. Do not smoke while handling this product.
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**Section VII. Handling and Storage (cont'd)**

**Storage** Keep containers closed when not in use. Store in closed containers in a dry, well-ventilated area. Do not store near heat, open flame, or sources of ignition. Avoid prolonged storage at elevated temperatures. Keep out of reach of children.

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

**Respiratory Protection** Use respiratory protection if needed to keep airborne levels below recommended oil mist exposure limits.

**Ventilation** Use in a well-ventilated area. See Engineering Controls.

**Protective Gloves** Wear lined non-permeable rubber gloves.

**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 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.

**Exposure Limit** See Section II.

**Section IX. Physical and Chemical Properties**

<b>Appearance/Odor</b>	Dark gray fluid, very low viscosity, slight mineral spirits odor	<b>Vapor Pressure</b>	2.7 mm Hg @ 68°F
<b>Odor Threshold</b>	Not available	<b>Vapor Density</b>	4.83
<b>Specific Gravity</b>	0.7595	<b>Percent Volatile</b>	99
<b>Density</b>	Not available	<b>Evaporation Rate</b>	Not available
<b>Molecular Weight</b>	Not available	<b>Viscosity</b>	Not available
<b>pH</b>	Not available	<b>Solubility in Water</b>	Insoluble
<b>Boiling Point</b>	315-385°F (157-196°C)	<b>Coefficient of Water/Oil Distribution</b>	Not available
<b>Freezing/Melting Point</b>	Not available	<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>	Avoid heat, sparks, open flames and oxidizing materials.		
<b>Hazardous Polymerization</b>	Hazardous polymerization will not occur.		
<b>Hazardous Decomposition Products</b>	Carbon monoxide, carbon dioxide, oxides of sulfur, 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.		

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**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.
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**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.
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**Section XIV. Transportation Information**

<b>U.S. D.O.T.</b>			
<b>Shipping Name:</b>	Combustible liquid, n.o.s.	<b>UN Number:</b>	NA1993
<b>Hazard Class:</b>	Combustible	<b>Packing Group:</b>	III
<b>Remarks</b>	The above U.S. DOT information applies to GROUND shipments in non-bulk containers only. Refer to Code of Federal Regulations, Title 49 (49 CFR) for additional shipping information.		

**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 :  None
<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>	WARNING! This product contains the following chemical(s) known to the State of California to cause birth defects or other reproductive harm:  4-4'-Methylenedianiline

**International Regulations:**

<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>	2/9/2009
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<b>Prepared by</b>	Technical Services 262-781-8850
<b>Sections Revised Since Last Version</b>	Section I

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