



# Material Safety Data Sheet

Approval Date 12/3/2012

Supersedes Date 12/2/2012

Section I. Chemical Product and Company Identification			
Product Name/ Trade Name	<b>FORMULA 491</b>	Product ID No.	411-20-0028-004; 411-20-0028-005; 411-20-0028-016; 411-20-0028-055; 411-20-0028-275
Supplier	<b>JOHN BEAN TECHNOLOGIES CORPORATION JBT FOODTECH 1622 FIRST STREET SANDUSKY, OH 44870 USA</b>	Emergency Telephone	In the event of a chemical spill, release, poisoning or exposure, Call 3E Company, Inc.: 800-451-8346 (North America) 001 760-602-8897 International
Synonym(s)	None	Non-Emergency Contact	JBT PHONE: 800-408-7788 JBT FAX: 419-626-4253
Chemical Family	Petroleum hydrocarbon oil blend		
Chemical Formula	Mixture		
Material Uses	Incidental-contact food machinery lubricant		

Section II. Composition and Information on Ingredients			
Name	PEL/TLV, Source	CAS #	% by Weight
PROPRIETARY FORMULA.	5 mg/m <sup>3</sup> (oil mist), OSHA	Mixture	100
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>	May cause slight irritation and redness.
<b>Skin Contact</b>	Contact with skin is not expected to cause prolonged or significant irritation. This product is not expected to be harmful to internal organs if absorbed through the skin.
<b>Ingestion</b>	Ingestion may cause irritation of the digestive tract. Aspiration into lungs can cause pneumonitis, which can be fatal.
<b>Inhalation</b>	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.

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

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

**Section IV. First Aid Measures**

<b>Eye Contact</b>	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.
<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>	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.
<b>Inhalation</b>	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 V. Fire and Explosion Data**

<b>Autoignition Temperature</b>	Not available
<b>Flash Point</b>	514°F (268°C), ASTM D 92
<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>Fire Fighting Media and Instructions</b>	Carbon dioxide (CO <sub>2</sub> ), dry powder, foam, water fog
<b>Special Remarks - Fire and Explosion Hazards</b>	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).

**Section VI. Accidental Release Measures**

<b>Release or Spill</b>	Recover free product. 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, watercourses, 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>	Keep away from heat, sparks, open flame or where temperature may exceed 49°C (120°F). "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.
<b>Storage</b>	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.

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

<b>Respiratory Protection</b>	Use respiratory protection if needed to keep airborne levels below recommended oil mist exposure limits.
<b>Ventilation</b>	Use in a well-ventilated area. See Engineering Controls.
<b>Protective Gloves</b>	Use chemical-resistant protective gloves.
<b>Eye Protection</b>	Chemical splash goggles or face shield in compliance with OSHA regulations are advised when eye contact may occur.
<b>Personal Hygiene</b>	Wash skin thoroughly after contact, before breaks and meals and at the end of the work period. Product is readily removed from skin by waterless hand cleaners followed by washing thoroughly with soap and water.
<b>Engineering Controls</b>	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits.
<b>Exposure Limit</b>	5 mg/m <sup>3</sup> (oil mist) OSHA, for total product; see Section II for component exposure limit(s).

**Section IX. Physical and Chemical Properties**

<b>Appearance/Odor</b>	Straw-colored oil with little or no odor	<b>Vapor Pressure</b>	Not available
		<b>Vapor Density</b>	Not available
<b>Odor Threshold</b>	Not available	<b>Percent Volatile</b>	Not available
<b>Specific Gravity</b>	0.88 (typical)	<b>Evaporation Rate</b>	Not available
<b>Density</b>	7.34 lbs/US gallon (typical)	<b>Solubility in Water</b>	Nil
<b>pH</b>	Not available	<b>Coefficient of Water/Oil Distribution</b>	Not available
<b>Boiling Point</b>	Not available	<b>Physical State</b>	Liquid
<b>Freezing/Melting Point</b>	Not available		

**Section X. Stability and Reactivity Data**

<b>Stability</b>	Stable under normal temperatures and pressures.
<b>Conditions of Reactivity</b>	Not available
<b>Conditions and Materials to Avoid</b>	Avoid contact with heat, sparks, open flames, and oxidizing agents.
<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 or IARC.		
<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>I.A.T.A. Air Transportation:</b>		<b>U.S. D.O.T. Ground Transportation:</b>	
<b>Shipping Name</b>	Not regulated	<b>Shipping Name</b>	Not regulated
<b>Hazard Class</b>	None		
<b>UN Number</b>	None		
<b>Packing Group</b>	None	<b>U.S. D.O.T. Remarks</b>	None
<b>I.A.T.A. Remarks</b>	None		

**Section XV. Regulatory Information****U.S. Federal Regulations:**

<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:
<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: None

**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>	12/3/2012
<b>Supersedes Date</b>	12/2/2012
<b>Sections Revised Since Last Version</b>	None

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