



# Material Safety Data Sheet

Approval Date 10/9/2008

Supersedes Date 7/1/2008

Review/Print Date 3/28/2013

Section I. Chemical Product and Company Identification	
Product Name/ Trade Name	FORMULA 546; FORMULA 546 XLT
Product ID No.	356026A; 356026B; 356026C; 356229A; 356229C
Supplier	JBT FOODTECH 1622 FIRST STREET SANDUSKY, OHIO 44870 USA
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
Chemical Family	Hydrocarbon
Chemical Formula	Mixture
Material Uses	Lubricant
Non-Emergency Contact	JBT PHONE: 800-433-6320 JBT FAX: 507-645-9664

Section II. Composition and Information on Ingredients				
Name	PEL/TLV, Source	CAS #	% by Weight	
PROPRIETARY FORMULA.				
Methacrylate copolymer	None established	Proprietary	5-15	
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>	May cause slight irritation.
<b>Ingestion</b>	Ingestion may cause irritation of the digestive tract. Aspiration into lungs can cause pneumonitis, which can be fatal.
<b>Inhalation</b>	Not expected to present an inhalation exposure risk at ambient temperatures. If vapors or mists are created upon heating or by mechanical means, those vapors or mists may cause irritation of the breathing passages.

Continued on Next Page

Section III. Hazards Identification (cont'd)					
HMIS Code	Health:	<b>1</b>	Fire:	<b>1</b>	<b>HAZARD RATINGS</b> 0 Minimal Hazard      3 Serious Hazard 1 Slight Hazard        4 Severe Hazard 2 Moderate Hazard
			Physical Hazard:	<b>0</b>	

Section IV. First Aid Measures	
<b>Eye Contact</b>	Remove contact lenses, if wearing, and flush eyes with water. If irritation persists, consult 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. Never give anything by mouth to an unconscious person. Consult a physician.
<b>Inhalation</b>	Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately.

Section V. Fire and Explosion Data	
<b>Autoignition Temperature</b>	Not available
<b>Flash Point</b>	442°F (228°C) min.
<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 nitrogen, oxides of sulfur, oxides of phosphorus, aldehydes, hydrogen sulfide, alkyl mercaptans, sulfides, diphenylamine, alkenes, smoke and irritating vapors as products of incomplete combustion.
<b>Fire Fighting Media and Instructions</b>	Dry chemical, alcohol foam, and carbon dioxide type extinguishing agents 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. Plan fire protection and response strategy through consultation with local fire protection authorities or appropriate specialists. The following procedures for this type of product are based on the recommendations in the National Fire Protection Association's Fire Protection Guide on Hazardous Materials. Use water to keep fire-exposed containers cool. If a leak or spill has not ignited, use water spray to disperse the vapors and to provide protection for men attempting to stop a leak. Water spray may be used to flush spills away from explosives. Firefighters should wear full protective gear, including helmet. Use supplied-air breathing equipment for enclosed or confined spaces or as otherwise needed.
<b>Special Remarks - Fire and Explosion Hazards</b>	For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus. 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>	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, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition as they may explode and can cause injury or death. Empty container should be promptly returned to a drum reconditioner.
<b>Storage</b>	Do not use in high-pressure systems in the vicinity of flames, sparks and hot surfaces. Keep container closed. Do not store near heat, sparks, open flame, pilot lights, static electricity, or where temperature may exceed 120°F (49°C).

**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>	Any lined non-permeable rubber 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 work period. Product is readily removed from skin by waterless hand cleaners followed by washing thoroughly with soap and water.
<b>Engineering Controls</b>	If user operations generate an oil mist, use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below the recommended mineral oil mist 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>	Red-colored lube oil with slight sulfur odor	<b>Vapor Pressure</b>	Nil
		<b>Vapor Density</b>	Not available
<b>Odor Threshold</b>	Not available	<b>Percent Volatile</b>	Nil
<b>Specific Gravity</b>	0.8353 - 0.8633	<b>Evaporation Rate</b>	Nil
<b>Density</b>	Not available	<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 heat, sparks, open flames, oxidizing materials, acids and strong reducing agents.
<b>Hazardous Polymerization</b>	Hazardous polymerization will not occur.
<b>Hazardous Decomposition Products</b>	Carbon monoxide, carbon dioxide, oxides of nitrogen, oxides of sulfur, oxides of phosphorus, aldehydes, hydrogen sulfide, alkyl mercaptans, sulfides, diphenylamine, alkenes, 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)**

**Teratogenic Effects** No data available to indicate any components present at greater than 0.1% may present a teratogenic hazard.

**Reproductive Effects** No data available to indicate any components present at greater than 0.1% may present a reproductive hazard.

**Section XII. Ecological Information**

**Ecotoxicity** There is no data available on the adverse effects of this material on the environment.

**Section XIII. Disposal Considerations**

**Waste Disposal** 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**

**U.S. D.O.T.**

**Shipping Name:** Not regulated

**UN Number:** None

**Hazard Class:** None

**Packing Group:** None

**Remarks** None

**Section XV. 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.

**California Prop. 65** WARNING: This product contains the following chemical(s) known to the State of California to cause birth defects or other reproductive harm:  
< 0.002% cadmium; < 0.002% lead; < 0.003% arsenic

**International Regulations:**

**Canada** 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.

**Japan MITI** Not available

**Australia** Not available

**Switzerland** Not available

**Section XVI. Other Information**

**Approval Date** 10/9/2008

**Supersedes Date** 7/1/2008

**Sections Revised Since Last Version** Section I

The information and recommendations contained herein are, to the best of JBT FoodTech's knowledge and belief, accurate and reliable as of the date issued. JBT FoodTech makes no warranty or guarantee, expressed or implied, of their accuracy or reliability, and JBT FoodTech shall not be liable for any loss or damage based upon the criteria supplied by the developers of these rating systems, together with JBT FoodTech's interpretation of the available data.