

# MATERIAL SAFETY DATA SHEET

<b>Manufacturer:</b> Schaeffer Mfg. Company		<b>Emergency Response Number:</b>				
<b>Address:</b> 102 Barton Street		314-865-4105 (24-hour response number) or				
<b>Address:</b> St. Louis, MO 63104		800-325-9962				
<b>SECTION 1 – PRODUCT INFORMATION</b>						
<b>Chemical Family:</b> Mixture		<b>Trade Name:</b> #112B Biodegradable Hydraulic Fluid ISO 46				
<b>Formula:</b> Proprietary Mixture						
<b>SECTION 2 – HAZARDOUS INGREDIENTS</b>						
COMPONENTS-CHEMICAL NAMES AND COMMON NAMES	CAS Number	%	Exposure Limits			
			TVL		PEL	
			ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
High oleic acid vegetable base oils	8001-21-6	60-70		10		10
Oleate esters of hindered polyols	57675-44-2	20-30		5		5
Butylated phenol mixture	Mixture	0.4-0.8		NE		NE
Diphenylamine	122-39-4	0.004-0.036		10		10
<b>Section 3 – PHYSICAL DATA</b>						
<b>Boiling Point:</b>	>300°F/149°C	<b>Specific Gravity:</b>	0.925			
<b>Vapor Pressure (mm, Hg):</b>	Not Determined	<b>% Volatile:</b>	Unknown			
<b>Vapor Density (Air = 1):</b>	Not Determined	<b>Evaporation Rate: (=1)</b>	Not Determined			
<b>Solubility in Water:</b>	Insoluble	<b>pH:</b>	Not Applicable			
<b>Appearance and Odor:</b> Yellow to Amber color liquid, mild odor.						
<b>SECTION 4 - FIRE AND EXPLOSION HAZARD DATA</b>						
<b>Flash Point (Method) °F/°C:</b> 466°F/241°C (ASTM D-92)		C.O.C.		<b>Flammability Limits UEL &amp; LEL</b> ----Not Determined		
<b>Extinguishing Media:</b> Carbon dioxide foam, dry chemical foam, sand, earth, waterfog.						
<b>Special Fire Fighting Procedures:</b> For fires involving this material, do not enter any enclosed or confined space without protective equipment including self-contained breathing apparatus.						
<b>Unusual Fire &amp; Explosion Hazards:</b> Dense black smoke.						
<b>SECTION 5 - REACTIVITY HAZARD DATA</b>						
<b>STABILITY</b> <input checked="" type="checkbox"/> STABLE <input type="checkbox"/> UNSTABLE		<b>Hazardous Decomposition</b> <input type="checkbox"/> WILL <input checked="" type="checkbox"/> WILL NOT OCCUR				
<b>Conditions to Avoid:</b> High heat, high energy ignition sources						
<b>Incompatibility (Mat. to avoid):</b> Strong oxidants						
<b>Hazardous Decomposition Products:</b> Carbon monoxides and aldehydes.						
<b>Conditions to Avoid:</b> None						
<b>SECTION 6 - HEALTH HAZARD DATA</b>						
<b>Threshold Limit Value and Sources:</b> 10/mg/m <sup>3</sup> for oil mist. OSHA & ACGIH.						
<b>Acute Effects of Overexposure:</b>						
<b>Ingestion:</b>	Nausea and Diarrhea.					
<b>Eye Contact:</b>	Irritation and redness to eyes					
<b>Skin Contact:</b>	Prolonged and repeated contact with the skin may cause dermatitis.					
<b>Inhalation:</b>	Inhalation of oil mists or vapors at elevated temperatures may cause irritation to the upper respiratory tract.					
<b>CHRONIC EFFECTS OF OVEREXPOSURE:</b> None currently known						
<b>Emergency and First Aid Procedures:</b>						
<b>Swallowing:</b>	If conscious give 2 glasses of water. Do not induce vomiting. Seek medical attention immediately..					
<b>Skin:</b>	Wash skin thoroughly with soap and water. Launder contaminated clothing.					
<b>Inhalation:</b>	Remove victim to fresh air. If breathing is labored administer oxygen. If breathing has stopped start artificial respiration immediately.					
<b>Eyes:</b>	Flush eyes with clear, cool, clean water for 15 minutes. Seek medical attention immediately					
<b>SECTION 7 – SPILL OR LEAK PROCEDURES</b>						
<b>Environmental Impact:</b> Though this product is biodegradable, all oil spills even those of vegetable oil base products must be reported to the National Response Center (U.S. Coast Guard) if they are spilled into rivers, creeks, streams or other natural waterways or courses. The Coast Guard Toll Free No. 800-424-8802.						
<b>Procedures To Be Taken If Material Is Released or Spilled:</b> Prevent entry into sewers and waterways. Absorb spills with absorbent material. Pick up and put in waste disposal drum.						
<b>Waste Disposal Method:</b> Material if discarded is not expected to be a characteristic hazardous waste under RCRA Waste Management and disposal should be done in compliance with all applicable federal, state, and local laws and regulations.						
<b>SECTION 8 – SPECIAL PROTECTION INFORMATION</b>						
<b>Respiratory Protection:</b>	None required under ordinary conditions of use.					
<b>Ventilation:</b>	No special requirement under ordinary conditions of use and with adequate ventilation.					
<b>Eye Protection:</b>	Goggles of face shield.					
<b>Protective Clothing:</b>	Impervious gloves (neoprene or nitrile)					
<b>SECTION 9 – SPECIAL PRECAUTIONS</b>						
<b>Precautions To Be Taken In Handling and Storage:</b> Keep containers closed when not in use. Wash thoroughly after handling.						
<b>Special Comments:</b> No special storage precautions are required.						

SECTION 10 – ADDITIONAL HEALTH AND TOXICOLOGICAL DATA

This product does not contain any of the chemicals that are considered to be carcinogenic by the National Toxicology Program Annual Reports, OSHA's subpart Z list or the International Agency for Cancer Research Monographs.

This product does not contain greater than 1% of any chemical substances listed under SARA Section 313, CERCLA's 302/304 and 102 (a) lists.

This product does not contain any of the chemicals that are found on the State of California's Proposition 65 List to cause cancer or birth defects.

All of the components in this material are on the US TSCA Inventory. All of the components in this material are in compliance with the Canadian Environmental Act.

Biodegradability:

CEC-L-33-T-93 >95%  
Modified Strum OECD 301B >61%

Ecotoxicity

Fathead Minnow 96hours LC50 ,ppm >10,000ppm  
Daphina Magna 48 hours EC50, ppm >10,000 WAF

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