

**MATERIAL SAFETY DATA SHEET**

MSDS Date: 7/1/02  
 Supersedes: 6/9/99

**Section 1: PRODUCT IDENTIFICATION**

**PRODUCT NAME:** Dyna-Flo Crankcase Pump Oil  
**PRODUCT DESCRIPTION:** Hydraulic oil w/ anti-wear,oxidizer,& rust inhibitor  
**CHEMICAL FAMILY:** Liquid  
**MANUFACTURER:** Citgo

**Section 2: HAZARDOUS INGREDIENTS**

Chemical Name	CAS No.	Percent	OSHA - PEL	ACGIH - TLV
Refined Petroleum Oil(s)	64741-88-4 64741-89-5 64742-01-4 64742-62-7	>85%		

**Section 3: PHYSICAL AND CHEMICAL DATA**

<b>BOILING POINT:</b> -718-920°F	<b>SPECIFIC GRAVITY:</b> ~0.87-0.91
<b>VAPOR PRESSURE:</b> 1x10 <sup>-5</sup> to 1x10 <sup>-3</sup>	<b>% VOLATILE BY VOLUME:</b> Negligible
<b>VAPOR DENSITY:</b> >1	<b>EVAPORATION RATE:</b> <1
<b>SOLUBILITY IN WATER:</b> Negligible	<b>FREEZING POINT:</b> ND
<b>PHOSPHOROUS CONTENT:</b> NA	<b>pH @ 100%:</b> NA
<b>APPEARANCE AND ODOR:</b> Amber to dark amber liquid, mild odor	

**Section 4: FIRE AND EXPLOSION HAZARDS**

<b>FLASH POINT:</b> 450-575°F	<b>FLAMMABLE LIMITS:</b> No Data
<b>EXTINGUISHING MEDIA:</b> CO <sub>2</sub> , dry chemical, foam, water fog	
<b>SPECIAL FIREFIGHTING PROCEDURES:</b> None	
<b>UNUSUAL FIRE AND EXPLOSION HAZARDS:</b> Material may be ignited by spark or flame.	

**Section 5: HEALTH AND HAZARD DATA**

<b>EFFECTS OF OVEREXPOSURE:</b> drying,dermatitis,folliculitus	<b>FIRST AID PROCEDURES:</b>
<b>INGESTION:</b> stomach discomfort, diarrhea, & headache can occur	<b>INGESTION:</b> Seek medical attn.
<b>SKIN:</b> mild skin irritation	<b>SKIN:</b> Wash skin w/ soap &H <sub>2</sub> O
<b>EYES:</b> mild eye irritation	<b>EYES:</b> Flush w/ cool water
<b>INHALATION:</b> drowsiness, dizziness,headache,nausea,or lung irritation	<b>INHALATION:</b> Move to fresh air.
<b>IN ALL CASES: Get prompt medical attention if effects persist. NEVER give anything by mouth to an unconscious person.</b>	

**Section 6: REACTIVITY DATA**

<b>STABLE:</b> X	<b>UNSTABLE:</b>
<b>CONDITIONS TO AVOID:</b> None	
<b>INCOMPATIBILITY:</b> Strong oxidants	
<b>HAZARDOUS DECOMPOSITION PRODUCTS:</b>	CO <sub>2</sub> ,&possible traces oxides of phosphorus,sulfur,zinc.
<b>HAZARDOUS POLYMERIZATION OCCURS:</b>	<b>DOES NOT OCCUR:</b> X

**Section 7: STORAGE, HANDLING AND USE**

**STEPS TO FOLLOW IF MATERIAL IS SPILLED OR RELEASED:**  
 Remove ignition source, isolate spill, ventilate area of spill.

**WASTE DISPOSAL METHOD:** Dispose of properly and in accordance with local and national laws.

**HANDLING AND STORAGE:** Store in a cool , dry, well ventilated area. Keep heat,flame, and strong oxidizing agents.

**Section 8: PERSONAL PROTECTION INFORMATION**

<b>RESPIRATOR PROTECTION:</b> None required, NIOSH/MSHS approved rerspirator recommended.	
<b>VENTILATION:</b> Use in a well ventilated area.	
<b>PROTECTIVE GLOVES:</b> Use Neoprene or nitrile rubbers gloves.	<b>EYE PROTECTION:</b> Safety goggles
<b>OTHER EQUIPMENT:</b> Cover exposed body parts & luander exposed clothing immediatley.	

**Section 9: TRANSPORTATION & REGULATORY INFORMATION**

**D.O.T. CLASSIFICATION:** Petroleum Lubricating Oil  
**CALIFORNIA PROP. 65:** Material not known to contain chemicals covered under this act.  
**FREIGHT BILL CLASSIFICATION:** Liquid

**Section 10: OTHER INFORMATION**

**SPECIAL PRECAUTIONS:** KEEP OUT OF REACH OF CHILDREN!  
 HMIS Ratings (0=Minimal, 1= Slight, 2=Moderate, 3=Serious, 4=Severe Hazard)  
 Health: 0 Flammability: 1 Reactivity: 0

N/A = Not Applicable N/E = Not Established

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