



Crankcase Oil

Models	Case	6100
	Twin-Pack	6105
	Bottle	6107
	Drum	6109

TYPICAL INSPECTION TESTS

Grade ASTM	315
Grade AGMA	2
API Specific Gravity, @60°F	29.4
Specific Gravity @60°F	0.88
Color ASTM	< 7.0
Flash Point COC °F	400°
Fire Point COC °F	424°
Pour Point °F Typical	-40°
Kinematic Viscosity	
104°F, cst	68.0
212°F, cst	10.2
Viscosity Index	135
Aniline Point °F	190°
Foam Test ASTM	Pass
Total Acid Number, mg*KOH/g	0.9
Total Base Number, mg*KOH/g	0.6
Carbon Residue, Rams, Wt. %026
Zinc Content, ppm	500
Phosphorus Content, ppm	360
Rust Test, ASTM D 665, A&B	Pass
Copper Corrosion, 3 Hrs. @212°F	1a

FEATURES

- Special blend, multi-viscosity petroleum based hydraulic lubricant for high pressure hydraulic systems.
- Non-detergent for greater wear and protection at high RPM and high pressure.
- Anti-wear, high pressure, and oxidizer inhibitor additives for maximum protection and wear.
- Runs significantly cooler than typical lubricants, enhancing the longevity of components.

SPECIFICATIONS:

	6100	6105	6107	6109
Grade				
Special Hydraulic	ISO 68	ISO 68	ISO 68	ISO 68
Capacity	Case (12-21 oz.)	5 Gal. (2-2.5 Gal.)	Bottle (21 oz.)	Drum (30 Gal.)
Weight	7 lbs.	41 lbs.	21 oz.	243 lbs.
Dimensions	10x10x6.75"	15x15x9.5"	6x3x2"	18x29"

GENERAL USE

Good lubrication is the easiest, most efficient and least expensive preventative maintenance for your pump. Change initial fill after 50 hours running period. Change oil every 3 months or at 500 hour intervals thereafter.

Refer to individual data sheet or service manuals for prescribed amount of oil for each pump crankcase and fill crankcase to designated level (usually to marking on oil gauge).

Pumps using wicks should be periodically lubricated through the access holes on the top front of the crankcase. See Tech Bulletin 024 on lubrication of the Lo-Pressure seals. Larger pumps often use oilers.

Oilers should be filled at start-up and opened for a minimum of thirty minutes prior to start-up. Adjust drip rate after start-up according to operating cycle of pump. (Approximately 2-3 drops per hole per week for typical installation.) See Tech Bulletin 024.

"Customer confidence is our greatest asset"

MATERIAL SAFETY DATA SHEET

7-1-03

Product Trade Name: *CAT PUMPS Premium Grade Hydraulic*
Chemical Name & Synonyms: *Non-Detergent Multi-Viscosity ISO-68*
Grade with Anti-Wear, High Pressure, and Oxidation Inhibitor Additives
Chemical Family: *Petroleum Hydrocarbon plus additives*
Formula: *Petroleum Base Stock and Zinc Dithiophosphate*

National Fire Protection Association 704M Signal (or estimate)
Freight Class: 65
EMERGENCY NUMBER: 800-424-9300

I. HAZARDOUS INGREDIENTS - IDENTITY INFORMATION

OSHA PEL.....Paraffin Base Mixture.....5 mg/m³ (oil mist)
ACGIH TVL.....5 mg/m³

No regulated ingredients. Contains ZDDP (below reportable threshold),
Evenly refined mineral oils,
Proprietary additives.

II. PHYSICAL DATA

a. Boiling point (°F): >400°F (>204°C)
b. Vapor pressure (mm Hg): *Not determined.*
c. Vapor density (Air = 1): >1
d. Solubility in water (%): *Negligible*
e. Specific gravity (H₂O = 1): *0.88 @ 60°F (15.6°C)*

f. Percent volatile by volume: *Negligible*
g. Evaporation rate: (n-Butyl Acetate=1) *Negligible*
h. Appearance and odor: *Greenish fluid, mild petroleum odor*
i. Melting point: *Liquid*

III. FIRE AND EXPLOSION HAZARD DATA

a. Flash point: >392°F
b. Ignition temperature (°F): *730 estimated*
c. Flammable limitation: *LEL 0.9% UEL: 7%*
d. Extinguishing media: *Water Fog, Foam, CO₂, Dry Chemicals*
e. Special fire fighting procedures: *Use water spray to keep fire-exposed containers cool. If leak or spill has not ignited, use water spray to disperse the vapors. Utilize air-supplied breathing equipment in confined or enclosed areas.*

f. Unusual fire and explosion hazards: *Empty containers can be dangerous; do not cut, weld, solder, drill or grind—explosion can result.*
g. HMIS Rating: *Health - 1, Fire - 1, Reactivity - 0, Special Hazard - B*

IV. HEALTH HAZARD DATA

a. Route(s) of Entry: *Inhalation Not a problem at room temperature/avoid mist Skin Avoid prolonged skin contact. Ingestion Possible*
b. Health Hazards (Acute and Chronic): *Prolonged or repeated skin contact may cause irritation. Eye contact can cause discomfort. Ingestion can cause gastrointestinal distress.*
c. Carcinogenicity: *NTP No IARC Monographs No OSHA Regulated No*
d. Medical Conditions: *Generally Aggravated by Exposure: Product has a low order of toxicity. In normal use should not be harmful.*

Emergency and First Aid Procedures:

a. Eyes: *Flush with clean, clear water until irritation subsides. If irritation persists, see a physician.*
b. Skin: *Remove contaminated clothing, wash contaminated area thoroughly with soap and water. If redness or irritation occurs, seek medical attention.*
c. Inhalation: *If overcome by inhalation of hot vapors, remove to fresh air. Seek immediate medical attention if necessary.*
e. Ingestion: *Do not induce vomiting, contact a physician.*

V. REACTIVITY DATA

a. Stability: *Stable*
b. Incompatible materials: *Strong oxidizing materials and acids.*
c. Hazardous Decomposition Products: *May form oxides of carbon, sulfur, phosphorus and nitrogen if combusted.*
d. Hazardous Polymerization: *Will not occur.*
e. Conditions to avoid: *High temperature and product contamination.*

VI. PRECAUTIONS FOR SAFE HANDLING AND USE

a. Steps to be taken in case material is released or spilled: *Contain spill with use of sorbent media. Keep spill from entering sewers or waterways.*
b. Waste disposal methods: *Disposal must be in accordance with local, state and federal regulations.*

c. Precautions to be taken in handling and storing: *Keep containers closed when not in use. Store in cool, dry area away from sources of ignition.*
d. Other precautions: *Do not pressurize, weld, cut, solder, or drill empty drums. Fumes can be explosive.*

VII. SPECIAL PROTECTION INFORMATION

a. Respiratory Protection (Specify Type): *Normally not needed.*
b. Ventilation: *Local exhaust: Not Necessary Mechanical (General): Recommended Special: No Other: No*
c. Protective Gloves: *Oil resistant.*

d. Eye Protection: *Chemical goggles, splash shield.*
e. Other Protective Clothing or Equipment: *Oil resistant apron if desired.*
f. Work/Hygienic Practices: *Launder contaminated clothing before re-use. Cleanse skin thoroughly after contact. Properly dispose of contaminated leather articles and other materials which cannot be decontaminated.*

Products described herein are covered by one or more of the following U.S. patents: 2559244, 3652188, 3809308, 3920358, 3930156 and 5035580

World Headquarters

CAT PUMPS

1631-94th Lane N.E. Minneapolis, MN 55449-4324
Phone (763) 780-5440 — FAX (763) 780-2958
e-mail: techsupport@catpumps.com
www.catpumps.com

International Inquiries

FAX (763) 785-4329
e-mail: intlsales@catpumps.com



The Pumps with Nine Lives

CAT PUMPS (U.K.) LTD.

1 Fleet Business Park, Sandy Lane, Cluich Crookham, Fleet
Hampshire GU52 8BF, England
Phone Fleet 44 1252-622091 — Fax 44 1252-626655
e-mail: sales@catpumps.co.uk

N.V. CAT PUMPS INTERNATIONAL S.A.

Hoelveldeleens 6A, 2550 Kontich, Belgium
Phone 32-3-450.71.50 — Fax 32-3-450.71.51
e-mail: cp1@catpumps.be www.catpumps.be

CAT PUMPS DEUTSCHLAND GmbH

Buchhies 2, D-65510 Idstein, Germany
Phone 49 6125-9303 0 — Fax 49 6125-9303 33
e-mail: catpumps@t-online.de www.catpumps.de