

MATERIAL SAFETY DATA SHEET

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Hydraulic R&O 320

Product Code:

Chemical Name: Hydraulic Oil

Chemical Family: Blend

Manufacturer: Scot Lubricants of PA
1801 E. Tremont Street
P.O. Box 326
Allentown, PA 18105

Emergency Telephone Numbers:

Information: 610-433-2527 8am-5pm EST M-F
CHEMTREC: 800-424-9300 24 hrs Everyday

2. COMPOSITION/INFORMATION ON INGREDIENTS

EXPOSURE GUIDELINES Component/CAS Number	LO%	HI%	OSHA		ACGIH		UNIT
			TWA	STEL	TWA	STEL	
LIMITS FOR THE PRODUCT			5		5		MG/M3
SEVERELY SOLVENT REFINED HEAVY PARAFFINIC PETROLEUM OIL							
64741-88-4	90.00	100.00	5		5		MG/M3
ZINC DIALKYL DITHIOPHOSPHATE							
68649-42-3	.00	1.00			NO SPECIFIC LIMIT		
BUTYLATED PHENOL							
128-39-2	.00	1.00			NO SPECIFIC LIMIT		
ACRYLIC COPOLYMER							
68171-46-0	.00	1.00			NO SPECIFIC LIMIT		
CALCIUM SULFONATE							
61789-86-4	.00	1.00			NO SPECIFIC LIMIT		
2-ETHYLHEXANOL							
104-76-7	.00	1.00			NO SPECIFIC LIMIT		
ADDITIONAL EXPOSURE LIMITS	----- GOVERNMENT REGULATION						
OTHER LIMIT – OIL MIST: 5MG/M3			OSHA PEL/ACGIH TLV				

3. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW

MAY CAUSE SKIN IRRITATION

APPEARANCE: AMBER FLUID

ODOR: SLIGHT ODOR

POTENTIAL HEALTH EFFECTS:

INHALATION: NO EFFECTS EXPECTED.

INGESTION: PRACTICALLY NON-TOXIC.

EYE CONTACT: EXPECTED TO BE MINOR EYE IRRITANT.

SKIN CONTACT: PRACTICALLY NON- TOXIC IF ABSORBED (LD50 > 2000 MG/KG). MAY CAUSE MODERATE IRRITATION WITH PROLONGED OR REPEATED CONTACT.

CARCINOGEN LISTED BY: IARC (NO) NTP (NO) OSHA9NO) ACGIH (NO) OTHER (NO)

NFPA/HMIS CLASSIFICATION

HEALTH – 0/0

FLAMMABILITY – 1/1

REACTIVITY – 0/0

HAZARD RATING

0= LEAST 1=SLIGHT

2=MODERATE 3=HIGH

4=EXTREME

Revision: 04/30/07

NA=Not Applicable

ND=No Data

NE=Not Established

4. FIRST AID MEASURES

INHALATION: Move to fresh air.

EYE CONTACT: Flush with water for at least 15 minutes. If irritation persists, obtain medical assistance.

SKIN CONTACT: Wash with soap and water until no odor remains. If redness or swelling develops, obtain medical assistance. Wash clothing before reuse

INGESTION: Practically non-toxic. Induction of vomiting not required. Obtain emergency medical attention. Small amounts which accidentally enter mouth should be rinsed out until taste of it is gone.

5. FIRE FIGHTING MEASURES

FLASHPOINT (METHOD): 425°F Minimum COC; 219°C Minimum COC

FLAMMABLE LIMITS: Not established

AUTOIGNITION TEMP: 675°F Estimated; 359°C Estimated

EXTINGUISHING MEDIA: Water spray, dry chemical, carbon dioxide (CO₂), foam.

FIRE FIGHTING INSTRUCTIONS: Avoid breathing smoke and vapor.

FIRE FIGHTING EQUIPMENT: Wear self-contained breathing apparatus and protective clothing. Use water spray to keep fire-exposed containers cool

HAZARDOUS COMBUSTION PRODUCTS: Normal combustion forms carbon dioxide and water vapor; incomplete combustion can produce carbon monoxide.

6. ACCIDENTAL RELEASE MEASURES

SPILLS OR LEAKS: Contain spill, advise EPA; state agency if required. Absorb on inert material, shovel, sweep or vacuum spill.

7. HANDLING AND STORAGE

NFPA Class IIIB Storage. Wash thoroughly after handling.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION: Ventilate as needed to comply with exposure limit. General dilution ventilation acceptable.

PERSONAL PROTECTIVE EQUIPMENT

EYE: Splash proof chemical goggles recommended to protect against splash of product.

GLOVES: Protective gloves recommended when prolonged skin contact cannot be avoided. The following glove materials are acceptable: polyvinyl chloride (PVC); neoprene; nitrile; polyvinyl alcohol; viton.

RESPIRATOR: Concentration in air determines protection needed. Use only NIOSH certified respiratory protection. Respiratory protection usually not needed unless product is heated or misted. Half-mask air purifying respirator with dust/mist filters or HEPA filter cartridges is acceptable to 10 times the exposure limit. Full-face air purifying respirator with dust/mist filters or HEPA filter cartridges is acceptable to 50 times the exposure limit.

Protection by air purifying respirators is limited. Use a positive pressure demand full face supplied air respirator or SCBA for exposures above 50X the exposure limit. If exposure is above IDLH (immediately dangerous to life and health) or there is the possibility of an uncontrolled release or exposure levels are unknown then use a positive pressure demand full face supplied air respirator with escape bottle or SCBA.

OTHER: If contact is unavoidable, wear chemical resistant clothing. The following materials are acceptable as protective clothing materials: polyvinyl alcohol (PVA); polyvinyl chloride (PVC); neoprene; nitrile; viton; polyurethane; launder soiled clothes.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/ODOR: AMBER FLUID/SLIGHT ODOR.
VAPOR PRESSURE: <0.0001 (MM HG @ 20°C)
MOLECULAR WEIGHT: N/A (G/MOLE)
SOLUBILITY IN WATER: NIL (% BY VOLUME)
EVAPORATION RATE: 1000X SLOWER (ETHYL ETHER=1)
SPECIFIC GRAVITY: 0.86 (WATER=1)
VISCOSITY: 352 SUS @ 100°F 68 cSt @ 40°C

BOILING POINT: HIGH
MELTING POINT: N/A
PACKING DENSITY: N/A
OCTANOL/WATER COEFF: N.D.
ODOR THRESHOLD: N.D.
VAPOR DENSITY: 10+ (AIR =1)

10. STABILITY AND REACTIVITY

STABILITY: Stable.
CONDITIONS TO AVOID: None known.
MATERIALS TO AVOID: Strong oxidizing agents.
HAZARDOUS POLYMERIZATION: Will not occur.
HAZARDOUS DECOMPOSITION: Combustion will produce carbon monoxide and asphyxiants.

11. TOXICOLOGICAL INFORMATION

FOR THE PRODUCT –

INHALATION: Low acute toxicity. **SKIN:** Practically non-toxic if absorbed. Mild irritation with prolonged or repeated contact. **EYE:** Mildly irritating on contact. **ORAL:** Practically non-toxic.
SEVERELY SOLVENT REFINED HEAVY PARAFFINIC PETROLEUM OIL: **INHALATION:** low acute toxicity. **SKIN:** practically non-toxic if absorbed may cause moderate irritation with prolonged and repeated contact. **EYE:** minimally irritating on contact. **INGESTION:** Practically non-toxic if swallowed.
CALCIUM SULFONATE: **INHALATION/INGESTION:** No data available. **SKIN:** Moderate irritant. Cause allergic skin reaction in animals. **EYE:** Moderate to severe irritation.
BUTYLATED PHENOL: No data available for all routes of exposure.
ZINC DIALKYL DITHIOPHOSPHATE: **INHALATION:** Toxic hydrogen sulfide is generated when heated above 200 deg. F. This can cause central nervous system (brain) effects, nausea, dizziness, confusion, loss of sense of smell, muscle cramps, in coordination, unconsciousness, coma, respiratory failure, or death. **SKIN:** Prolonged or repeated contact may cause moderate irritation, redness, drying, cracking, and dermatitis. **EYE:** Irritant. **ORAL:** Harmful if swallowed.
ACRYLIC COPOLYMER: No data available for all routes of exposure.
2-ETHYLHEXANOL: **INHALATION:** Overexposure may cause nose, throat irritation, nasal discomfort and discharge, chest pain, cough, headache, nausea, vomiting. **SKIN:** Irritant. May cause corneal injury. **ORAL:** Moderately toxic. May cause abdominal discomfort, nausea, vomiting, and diarrhea.

12. ECOLOGICAL INFORMATION

ECOTOXICITY: No data available.

13. DISPOSAL INFORMATION

Follow federal, state and local regulations. Not RCRA hazardous waste if uncontaminated. If “used”, RCRA criteria (ignitability, reactivity corrosivity, toxicity characteristics) must be determined. Do not flush to drain/storm sewer. Contract to authorized disposal service.

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