

SAFETY DATA SHEET

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: FS INDUSTRIAL HYDRAULIC OIL ISO 32 (Canada)		WHMIS: Not controlled	
Product Use: Hydraulic fluid			
Manufacturer's Name: Forsythe Lubrication Associates			
Street Address: 120 Chatham Street			
City: Hamilton	Province: ON	Postal Code: L8P 2B5	Emergency Telephone: 905-525-7192

SECTION 2 – HAZARDS IDENTIFICATION

Emergency Overview:	
Classification in accordance with 29 CFR 1910.1200	Not hazardous according to classification criteria
GHS Label elements	
Symbol(s):	None needed according to classification criteria
Signal Word:	None needed according to classification criteria
Hazard Statement(s):	None needed according to classification criteria
Precautionary Statements – Prevention	
None needed according to classification criteria	
Precautionary Statements – Response	
None needed according to classification criteria	
Precautionary Statements – Storage	
None needed according to classification criteria	
Precautionary Statements – Disposal	
Dispose of in accordance with all applicable federal, state and local regulations	
Hazards not otherwise classified (HNOC)	
Repeated exposure may cause skin dryness or cracking	

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Component	% by wt.	CAS Number
Lubricating oils, petroleum, hydrotreated spent	14-99	64742-58-1
Petroleum distillates, solvent-refined heavy paraffinic	0-85*	64741-88-4
Residual oils (petroleum), hydrotreated	0-85*	64742-57-0
Residual oils (petroleum), solvent dewaxed	0-100*	64742-62-7
Residual oils (petroleum), solvent refined	0-85*	64742-01-4
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	0.1-2	*
Mineral oil	0.1-1	*

*Supplier advises that this is a trade secret

SECTION 4 – FIRST AID MEASURES

EYE CONTACT:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if needed.
SKIN CONTACT:	Wash with plenty of soap and water. Get medical attention if needed.
INHALATION:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention, if needed.
INGESTION:	Immediately call a POISON CENTER or doctor/physician.

SECTION 5 – FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA:	Carbon dioxide, regular foam, dry chemical, water spray or water fog. Water or foam may cause frothing.
UNSUITABLE EXTINGUISHING MEDIA:	Do not use high-pressure water streams.
SPECIFIC HAZARDS DURING FIREFIGHTING:	Move container from fire area if it can be done without risk. Keep containers cool with water spray. Heated containers may rupture or be thrown into the air. "Empty" containers may retain residue and can be dangerous. Product is not sensitive to mechanical impact.
COMBUSTION PRODUCTS:	Decomposition and combustion materials may be toxic. Burning may produce sulfur oxides, aldehydes, ketones, carbon monoxide, and unidentified compounds.
PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS:	A positive-pressure, self contained breathing apparatus (SCBA) and full body protective equipment are required for fire emergencies.

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SECTION 6 – ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:	Wear personal protective clothing and equipment, see Section 8.
ENVIRONMENTAL PRECAUTIONS:	Avoid release to the environment.
METHOD FOR CONTAINMENT & CLEAN-UP:	Remove all ignition sources. Do not touch or walk through spilled products. Stop leak if you can do it without risk. Wear protective equipment and provide engineering controls as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapour or mist. Contain spill away from surface water and sewers. Contain spill as a liquid for possible recovery, or absorb with compatible sorbent material and shovel with a clean, spark-proof tool into a sealable container for disposal. Additionally, for large spills: Dike far ahead of liquid spill for collection and later disposal. There may be specific federal regulatory reporting requirements associated with spills, leaks, and releases of this product.

SECTION 7 – HANDLING & STORAGE

HANDLING PROCEDURES:	Keep away from sparks or flame. Where flammable mixtures may be present, equipment safe for such locations should be used. Use clean tools and explosion-proof equipment. When transferring large volumes of products, metal containers, including trucks and tank cars, should be grounded and bonded. These products have a low vapour pressure and are not expected to present an inhalation hazard under normal temperatures and pressures. However, when aerosolizing, misting, or heating these products, do not breathe vapour or mist. Use in well ventilated area. Avoid contact with eyes, skin, clothing, and shoes.
STORAGE PROCEDURES:	Keep container tightly closed when not in use and during transport. Store containers in a cool, dry place. Do not pressurize, cut, weld, braze, solder, drill, or grind containers. Keep containers away from heat, flame, sparks, static electricity, or other sources of ignition. Empty product containers may retain product residue and can be dangerous.

SECTION 8 – EXPOSURE CONTROL / PERSONAL PROTECTION

CONTROL PARAMETERS	
ENGINEERING MEASURES:	Where adequate general ventilation is unavailable, use process enclosures, local exhaust ventilation, or other engineering controls.
PERSONAL PROTECTIVE EQUIPMENT	

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RESPIRATORY PROTECTION:	No respiratory protection is normally required. Use NIOSH-certified P- or R-series particulate filter and organic vapour cartridges when concentration or vapour or mist exceeds applicable exposure limits. Protection provided by air purifying respirators is limited. Do not use N-rated respirators. Selection and use of respiratory protective equipment should be in accordance in the USA with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4. Consult with a health and safety professional for specific respirators appropriate for your use.
EYE PROTECTION:	Safety glasses with side shields should be worn at a minimum. Additional protection like goggles, face shields, or respirators may be needed dependent upon anticipated use and concentrations of mists or vapours. Provide an emergency eye wash fountain and quick drench shower in the immediate work area. Contact lens use is not recommended.
SKIN & BODY PROTECTION:	When skin contact is likely, wear neoprene, nitrile, or equivalent protective gloves; use of natural rubber or equivalent gloves is not recommended.

SECTION 9 – PHYSICAL & CHEMICAL PROPERTIES

Physical state	Liquid
Colour	Amber, red, green, or blue
Odour	Petroleum odour
Odour Threshold	Not available
pH	Not applicable
Melting/freezing point	Not available [pour point -6°C]
Boiling point/boiling range	246°C (475°F)
Flash point	165°C (329°F)
Evaporation Rate	Not available
Flammability Limit in Air	
Upper flammability limit	Not available
Lower flammability limit	Not available
Vapour pressure	< 0.1 mm Hg at 20°C (68°F)
Specific Gravity	0.88
Water Solubility	Insoluble
Solubility in other solvents	
Partition coefficient: n-octanol/water	Not available
Autoignition temperature	Not available
Kinematic viscosity	> 20.5 mm ² /s at 40°C (104°F)

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SECTION 10 – STABILITY & REACTIVITY

REACTIVITY	Non-reactive
CHEMICAL STABILITY	Stable under normal temperatures and pressures
HAZARDOUS POLYMERIZATION	Will not polymerize
CONDITIONS TO AVOID	Avoid sparks, flames, or other sources of ignition
INCOMPATIBLE MATERIALS	Avoid oxidizing agents
HAZARDOUS DECOMPOSITION PRODUCTS	None under normal temperatures and pressures

SECTION 11 – TOXICOLOGICAL INFORMATION

<u>Information on likely routes of exposure</u>			
INHALATION	No information on significant adverse effects		
EYE CONTACT	No information on significant adverse effects		
SKIN CONTACT	Repeated exposure may cause skin dryness or cracking		
INGESTION	May be harmful if swallowed		
Chemical name	Oral LD50 (Rat)	Dermal LD50 (Rabbit)	Inhalation LC50 (Rat)
Lubricating oils, petroleum, hydrotreated spent	> 2000 mg/kg	> 4480 mg/kg	-
Residual oils (petroleum), solvent dewaxed	> 5000 mg/kg	> 2000 mg/kg	2.18 mg/L, 4 hr
<u>Delayed and immediate effects as well as chronic effects from short and long-term exposure</u>			
Sensitization	No information available for the product		
Mutagenic Effects	No information available for the product		
Carcinogenicity	None of this product’s components are listed by ACGIH, IARC, OSHA, NIOSH, or NTP		
Reproductive toxicity	No epidemiological data is available for this product		

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STOT – single exposure	No information on significant adverse effects
STOT – repeated exposure	No information on significant adverse effects
Aspiration Hazard	No data available

SECTION 12 – ECOLOGICAL INFORMATION

ECOTOXICITY	<p>Toxic to aquatic life</p> <p>Lubricating oils, petroleum, hydrotreated spent</p> <table border="0"> <thead> <tr> <th>Duration/Test/Species</th> <th>Concentration/Conditions</th> </tr> </thead> <tbody> <tr> <td>96 Hr LC50 Brachydanio rerio</td> <td>79.6 mg/L [semi-static]</td> </tr> <tr> <td>96 Hr LC50 Pimephales promelas</td> <td>3.2 mg/L [semi-static]</td> </tr> </tbody> </table> <p>Residual oils (petroleum), solvent dewaxed</p> <table border="0"> <thead> <tr> <th>Duration/Test/Species</th> <th>Concentration/Conditions</th> </tr> </thead> <tbody> <tr> <td>96 Hr LC50 Oncorhynchus mykiss</td> <td>> 5000 mg/L</td> </tr> <tr> <td>48 Hr EC50 Daphnia magna</td> <td>> 1000 mg/L</td> </tr> </tbody> </table> <p>Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts</p> <table border="0"> <thead> <tr> <th>Duration/Test/Species</th> <th>Concentration/Conditions</th> </tr> </thead> <tbody> <tr> <td>96 Hr LC50 Pimephales promelas</td> <td>1.0-5.0 mg/L [static]</td> </tr> <tr> <td>96 Hr LC50 Pimephales promelas</td> <td>10.0-35.0 mg/L [semi-static]</td> </tr> <tr> <td>48 Hr EC50 Daphnia magna</td> <td>1.0-1.5 mg/L</td> </tr> </tbody> </table>	Duration/Test/Species	Concentration/Conditions	96 Hr LC50 Brachydanio rerio	79.6 mg/L [semi-static]	96 Hr LC50 Pimephales promelas	3.2 mg/L [semi-static]	Duration/Test/Species	Concentration/Conditions	96 Hr LC50 Oncorhynchus mykiss	> 5000 mg/L	48 Hr EC50 Daphnia magna	> 1000 mg/L	Duration/Test/Species	Concentration/Conditions	96 Hr LC50 Pimephales promelas	1.0-5.0 mg/L [static]	96 Hr LC50 Pimephales promelas	10.0-35.0 mg/L [semi-static]	48 Hr EC50 Daphnia magna	1.0-1.5 mg/L
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PERSISTENCE & DEGRADABILITY	No information available for the product																				
BIOACCUMULATION	No information available for the product																				
OTHER ADVERSE EFFECTS	No additional information is available																				

SECTION 13 – DISPOSAL CONSIDERATIONS

DISPOSAL METHODS	<p>Dispose in accordance with federal, state, provincial, and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste. This product, if discarded, is not expected to be a characteristic or listed hazardous waste. If recycled in the USA, this product can be managed in accordance with the used oil exemption under 40 CFR Part 279. Processing, use, or contamination by the user may change the waste code(s) applicable to the disposal of these products.</p>
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For more information:
 Call 1-800-363-2759 or
 Email: gforsythe@forsythe.on.ca

SECTION 14 – TRANSPORT INFORMATION

<u>DOT</u>	Not regulated as a hazardous material for transportation
<u>TDG</u>	Not regulated as a dangerous good for transportation

SECTION 15 – REGULATORY INFORMATION

<u>US FEDERAL REGULATIONS</u>	
SARA 302/304	
Based on the ingredient(s) listed in Section 3, this product does not contain any “extremely hazardous substances” listed pursuant to Title III of the Superfund Amendment and Reauthorization Act of 1986 (SARA) Section 302 or 304 as identified in 40 CFR Part 355, Appendix A and B.	
SARA 311-312 HAZARD CATERGORIES	
Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Reactive Hazard	No
SARA 313	
This product contains a “toxic” chemical subject to the requirements of Section 313 of Title II of Superfund Amendment and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372	
<i>Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts</i> – 1.0% de minimis concentration	
CERCLA	
Based on the ingredient(s) listed in Section 3, this product does not contain any “hazardous substance” listed under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4.	
TSCA Inventory	
All the components of these products are listed on, or are automatically included as “naturally occurring chemical substances” on, or are exempted from the requirement to be listed on, the TSCA Inventory.	

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US STATE REGULATIONS

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS #	MA	MN	NJ	PA	CA
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	68649-42-3	Yes	No	No	Yes	Yes

No component(s) are listed under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65).

CANADIAN REGULATIONS

Component	CAS #	CAN
Lubricating oils, petroleum, hydrotreated solvent	64742-58-1	DSL
Residual oils (petroleum), solvent dewaxed	64742-62-7	DSL
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	68649-42-3	DSL

Canadian WHMIS Information

Not regulated

SECTION 16 – OTHER INFORMATION

Revision date: 08/20/2021

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