



SECTION I: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: **Penetrating Fluid 2000**

Product use: Used as anti-seize lubricant.

Manufacturer: WYS Manufacturing Ltd.
Bay 7 & 8, 4216 – 54th Ave. SE
Calgary, Alberta T2C 2E3
Phone 1-403-252-2239
Canada

Supplier: Maryn International Ltd.
Bay 5 & 6, 4216 – 54th Ave. SE
Calgary, Alberta T2C 2E3
Phone 1-403-252-2239
Canada

Emergency Phone Number: CANUTEC – 24 hr Emergency No. 1-613-996-6666
Business Hour Number 1-403-252-2239
(Monday through Friday 8:00am to 4:30pm MST)

MSDS Prepared By Z. Ansarizadeh
Phone 1-403-252-2239

Date Prepared November 13, 2008

SECTION II: COMPOSITION/ INFORMATION ON INGREDIENTS

Hazardous Ingredients	Concentration %	C.A.S. #	LD₅₀ (Species/Route)	LC₅₀ (Species/Route)
Light Petroleum Distillate Hydrotreated	60-100%	64742-47-8	>3160 mg/kg (Rabbit/Dermal) >15000 mg/kg (Rat/Oral)	NA
Ethoxylated Fatty Alcohol	1-5%	9004-98-2	>2000 mg/kg (Rat/Oral)	NA
Diocetyl Phthalate	0.1-1%	117-81-7	30000 mg/kg (Rat/Oral) 30000 mg/kg (Mouse/Oral) 34000 mg/kg (Rabbit/Oral) 25000 mg/kg (Rabbit/Dermal)	NA



NA: Not Available

SECTION III: Hazards Identification

Emergency Overview	Skin contact will cause irritation. Eye contact and inhalation may cause irritation.
Route of entry	Skin and eye contact, inhalation, and ingestion are the primary routes of exposure to this product.
Ingestion	May cause irritation to the digestive tract. Aspiration into lungs during ingestion or vomiting may cause chemical pneumonitis or pulmonary edema.
Inhalation	No inhalation dangers at room temperature as there are no vapours. If product is misted at elevated temperature, high concentration of vapour and/or mist may cause irritation, experienced as nasal discomfort and discharge. At concentrations above recommended exposure limit, may cause headaches, dizziness, anaesthesia, drowsiness, unconsciousness and other central nervous system effects including death.
Skin Contact and absorption	Frequent or prolonged contact may irritate the skin and cause a skin rash or dermatitis.
Eye Contact	Slight irritation to the eyes but will not cause injury to the eye tissue.
Effects of Chronic Exposure	Repeated exposure over prolonged periods of time may cause irritation to the skin, respiratory system and eyes. Product contains ingredients that may be carcinogenic to humans. Follow good industrial hygiene practices to avoid exposure.
Effects of Acute Exposure	Breathing mist caused by high temperature or swallowing large quantities may be irritating to skin, respiratory system, mucous membranes and eyes.

SECTION IV: First Aid Measures

Ingestion	Do not induce vomiting. Obtain medical attention immediately.
Skin Contact	Remove contaminated clothing. Wash affected area well with soap and water for at least 15 minutes. If redness or irritation occurs, obtain medical attention. Launder clothes prior to re-use.
Inhalation	Remove victim from further exposure. If excessive fumes, remove victim to fresh air. Those providing assistance, avoid exposure to yourself and others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, obtain medical attention immediately. If breathing has stopped or is difficult, trained personnel may provide oxygen or artificial respiration.
Eye Contact	Flush with clean tepid water for 15 minutes keeping eyelids open. Ensure proper irrigation by occasionally lifting upper and lower eyelids. If irritation persists, obtain medical attention.
Notes to Physician	If ingested, material may be aspirated into the lungs and can cause pulmonary pneumonitis. Treat appropriately.

SECTION V: Fire-Fighting Measures



Flammability	Non flammable at ambient temperature. Liquid may burn at temperatures above flash point if exposed to an open flame.
Means of Extinction	Carbon dioxide foam, dry chemicals. Keep containers cool with water spray. When fighting fire, treat as petroleum product, wear full protective clothing, including NIOSH approved self-contained breathing apparatus. Avoid spreading with water flooding.
Flash Point (ASTM D92)	94°C (201°F)
Upper Flammability Limits	Approximately 8.8% by volume.
Lower Flammability Limits	Approximately 1.3% by volume.
Auto Ignition Temperature	Approximately 250°C (482°F)
Hazardous Combustion Products	Oxides of carbon, nitrogen, sulphur and dense smoke
Fire and Explosion Hazards	None at normal temperatures below flash point. Do not cut, weld, or pressurize empty container. Container may explode in heat of fire.
Sensitivity to impact Static Discharge	None

SECTION VI: Accidental Release Measures

Personal Protection	Wear suitable protective equipment. Eliminate sources and or potential sources of ignition.
Environmental Precautions	Product is readily soluble in water. Do not flush to sewers, streams or other bodies of water. For disposal, see Section XIII.
Methods for cleaning up	Absorb on inert material such as sand, earth, vermiculite. Sweep up and collect in a suitable container for disposal. Observe government regulations.
Large spills	Stop leak if without risk. Dike to contain spill. Pump excess material into suitable container (metal drums, metal tanks, or such).

SECTION VII: Handling and Storage

Handling	Avoid excess heat, formation of oil mist, breathing vapours and mist from hot oil, and prolonged or repeated contact with skin
Storage	Store in a cool well ventilated area. Keep away from heat spark and open flame.

SECTION VIII: Exposure Controls / Personal Protection

Exposure Limits

If used in a way that generates a mist, observe the limits for mineral oil mist



Component	Exposure Limit (ACGIH)	Exposure Limit (OSHA)	Immediately Dangerous to Life and Health (IDLH)
Mineral Oil Mist	5 mg/m ³ TWA-TLV 10 mg/m ³ STEL-TLV	5 mg/m ³ TWA-PEL Not Established STEL-PEL	2500 mg/m ³
Diocetyl Phthalate	5 mg/m ³ TWA-TLV	5 mg/m ³ TWA-PEL	5000 mg/m ³ TWA-PEL

Engineering Controls	For normal application, special ventilation is not necessary. If user's operation generates mist, use ventilation to keep exposure to airborne contaminants below exposure limits
Respiratory Protection	Use approved respirator with dual organic vapour / mist and particulate cartridge if vapour concentration exceeds permissible exposure limit
Eye Protection	Use chemical splash goggles if risk of splashing present.
Skin Protection	Use rubber or plastic apron.
Hand Protection	Use oil resistant gloves.

SECTION IX: Physical and Chemical Properties

Physical State:	Liquid
Odour:	Mild petroleum odour
Appearance:	Clear, light amber
Odour Threshold:	Not established
Specific Gravity:	0.82 at 20°C (68°F)
Vapour Pressure:	<1.12 mm Hg at 25°C (77°F)
Vapour Density:	6.6 (Air = 1)
Evaporation Rate:	<0.1 (nButyl Acetate = 1)
Boiling Point:	>224°C (>435°F)
Pour Point:	-67°C (-88°F)
Solubility in Water:	Soluble
pH:	Not available
Partitioning Coefficient:	Not available

SECTION X: Stability and Reactivity

Chemical Stability:	Stable
Incompatibility:	Avoid contact with oxidizing agents, reducing agents, strong acids, strong bases and ignition source.
Reactivity:	No reactivity
Polymerization:	Will not occur
Decomposition Products:	Oxides of carbon, nitrogen, sulphur and dense smoke.



SECTION XI: Toxicological Information

Effects of Acute and Chronic Exposure:

Skin Contact Frequent or prolonged contact may irritate the skin and cause a skin rash.

Skin Absorption No evidence of adverse effects from available information. Minimally toxic. Prolonged contact may cause irritation or dermatitis.

Eye Contact Slight irritation to eyes, but will not injure eye tissue.

Inhalation No inhalation dangers at room temperature as there are no vapours. If the product is misted, high concentrations of vapours and/or mist may cause irritation, experienced as nasal discomfort and discharge. At concentrations above recommended exposure limit, may cause headaches, dizziness, anaesthesia, drowsiness, unconsciousness and other central nervous system effects including death.

Ingestion Minimally toxic. May cause irritation to the digestive tract. May be aspirated into lungs during ingestion or vomiting, which may lead to chemical pneumonitis or pulmonary edema.

Irritancy: Slight irritation to eyes. Frequent or prolonged contact may irritate skin. If misted, inhalation of mist may cause irritation.

Sensitization: Repeated or prolonged contact may cause sensitization in some individuals.

Carcinogenicity:

Ingredients	IARC – Carcinogens	ACGIH - Carcinogens
Light Petroleum Distillate Hydrotreated	Not listed	Not listed
Ethoxylated Fatty Alcohol	Not listed	Not listed
Dioctyl Phthalate	Listed - 3	Listed - A3

Reproductive Toxicity: Dioctyl Phthalate: Adverse reproductive effects have occurred in experimental animals.

Teratogenicity: Dioctyl Phthalate: May cause congenital malformation in the fetus. Boys of mom highly exposed to phthalates show stunted genitals. The higher the levels of phthalates in the mothers during the final months of pregnancy, the less masculine their boys were when examined by paediatricians.

Embryotoxicity: No information is available and no adverse effects are anticipated.

Mutagenicity: No information is available and no adverse effects are anticipated.

Toxicologically Synergistic Products: Not available.

SECTION XII: Ecological information

Environmental Fate:

No specific environmental fate data is available. This product is not expected to be readily biodegradable.

Environmental Effects:

No specific toxicity or environmental effect data is available.



SECTION XIII: Disposal Consideration

RCRA 40 CFR 261 Classification

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: Not Listed

RCRA U-Series: CAS 117-81-7: Waste Number U028

Waste Disposal

Dispose of waste material in compliance with all federal, state, provincial and local regulations. Incinerate in a furnace or bury in an approved landfill where permitted under appropriate federal, provincial and local regulations.

SECTION XIV: Transport Information

Department of Transport:	Not regulated under DOT
TDG – Canada	Not regulated under TDG.
DOT/TDG Proper Shipping Name:	None
DOT/TDG Hazard Class:	None
Product Identification Number:	None
Packing Group:	None
DOT/TDG Labels: Primary:	None required
Subsidiary:	None required
DOT/TDG Placards:	None required

SECTION XV: Regulatory Information

CPR Compliance:

This product has been classified in accordance with the hazard criteria of *the Controlled Products Regulations* and the MSDS contains all of the information required by those regulations.

OSHA Hazard Communication Standards 29CFR 1910.1200:

This product is not known to contain any of the carcinogens required to be listed under OSHA Hazards Communication Standards 29 CFR 1910.1200.

WHMIS Classification:

This product is classified under the following WHMIS category:

D2A Very Toxic Materials

D2B Toxic Materials

CERCLA:

CAS 117-81-7: 100 lb final RQ; 45.5 kg final RQ.

SARA Title III Section 311/312:

Under the provisions of Title III, Section 311/312 of the Superfund Amendments and Reauthorization Act, this product is classified into the following hazard category: CAS 117-81-7: immediate, delayed.



SARA Title III Section 313:

This product contains more than 0.1 % of CAS 117-81-7 listed under SARA Section 313.

RCRA:

CAS 117-81-7

NPRI:

CAS 117-81-7

Part 1A Substances

CAS 64742-47-8

Part 5 Substances

Chemical Inventory

Canada: The ingredients of this product are on the DSL.

United States: The ingredients of this product are on the TSCA

SECTION XVI Other Information

HMIS Information

Degree of Hazard	HMIS Rating
4= Severe	Health 1
3= Serious	Flammability 1
2= Moderate	Reactivity 0
1= Slight	
0= Minimal	

Revision Information

Prepared by: Maryn Research

Phone: 1-403-252-2239

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