Frequent or prolonged contact may irritate the skin and cause a skin rash (dermatitis).

INGESTION:

Low toxicity.
Small amounts of this liquid drawn into the lungs from swallowing or vomiting may cause severe health effects (e.g. bronchopneumonia or pulmonary edema).

CHRONIC:

The International Agency for Research on Cancer (IARC) has evaluated gasoline and found it to be a possible human carcinogen.
Contains benzene. Human health studies (epidemiology) indicate that prolonged and/or repeated overexposures to benzene may cause damage to the blood producing system and serious blood disorders, including leukemia.
Animal tests suggest that prolonged and/or repeated overexposures to benzene may damage the embryo/fetus. The relationship of these animal studies to humans has not been fully established.
Contains n-hexane. Prolonged and/or repeated exposures may cause damage to the peripheral nervous system (e.g. fingers, feet, arms etc.).
Methyl Tertiary Butyl Ether (MTBE) was tested for carcinogenicity, neurotoxicity, chronic, reproductive and developmental toxicity. The NOEL for all endpoints evaluated in three animal species was 400 ppm or greater. An increase in kidney tumors/damage and liver tumors was observed in animals exposed to high concentrations of MTBE. Some embryo/fetal toxicity and birth defects were observed in the offspring of pregnant mice exposed to maternally toxic doses of MTBE, however the offspring of exposed pregnant rabbits were unaffected. The significance of the animal findings at high exposures are not believed to be directly related to potential human health hazards in the workplace.

ACUTE TOXICITY DATA:

Based on animal testing data from similar materials and products, the acute toxicity of this product is expected to be:
Oral : LD50 > 18 ml/kg (Rat)
Dermal : LD50 > 5 ml/kg (Rabbit)

OCCUPATIONAL EXPOSURE LIMIT:

Manufacturer Recommends:
For gasoline, 300 mg/m3.
For Methyl-tert-Butyl Ether, 25 ppm (90 mg/m3) 8-hour TWA and 75 ppm (270 mg/m3) 15-minute STEL.

ACGIH recommends:
For Gasoline, ACGIH recommends a TWA of 300 ppm (890 mg/m3) and categorizes it as an animal carcinogen.
For n-Hexane (skin), 50 ppm (176 mg/m3).
For Benzene, ACGIH recommends a TWA of 0.5 ppm (1.6 mg/m3), (skin), and categorizes it as a confirmed human carcinogen.
For Methyl-tert-Butyl Ether, ACGIH recommends a TLV of 40 ppm (144 mg/m3) an categorizes it as an animal carcinogen.

Local regulated limits may vary.

5. FIRST AID MEASURES

INHALATION:

In emergency situations use proper respiratory protection to immediately remove the affected victim from exposure. Administer artificial respiration if breathing has stopped. Keep at rest. Call for prompt medical attention.

EYE CONTACT:

Flush eyes with large amounts of water until irritation subsides. If irritation persists, get medical attention.

SKIN CONTACT:

Flush with large amounts of water. Use soap if available.
Remove severely contaminated clothing (including shoes) and launder before reuse.
If irritation persists, seek medical attention.

INGESTION:

DO NOT induce vomiting since it is important that no amount of the material should enter the lungs (aspiration). Keep at rest. Get prompt medical attention.

6. PREVENTIVE AND CORRECTIVE MEASURES

PERSONAL PROTECTION:

The selection of personal protective equipment varies, depending upon conditions of use.
In open systems where contact is likely, wear safety goggles, chemical-resistant overalls, and chemically impervious gloves.
Where only incidental contact is likely, wear safety glasses with side shields. No other special precautions are necessary provided skin/eye contact is avoided.
Where concentrations in air may exceed the occupational exposure limits given in Section 4 and where engineering, work practices or other means of exposure reduction are not adequate, approved respirators may be necessary to prevent overexposure by inhalation.

ENGINEERING CONTROLS:

The use of local exhaust ventilation is recommended to control emissions near the source. Laboratory samples should be handled in a fumehood. Provide mechanical ventilation of confined spaces.

Use explosion-proof ventilation equipment.

HANDLING, STORAGE AND SHIPPING:

Keep containers closed. Handle and open containers with care.
In keeping with good personal hygiene practices, wash hands thoroughly after handling the material.

Store and load at normal (up to 38 deg C) temperature and at atmospheric pressure.
Material will accumulate static charges which may cause a spark. Static charge build-up could become an ignition source. Use proper relaxation and grounding procedures.
For personnel entry into confined spaces (i.e. bulk storage tanks) a proper confined space entry procedure must be followed including ventilation and testing of tank atmosphere.
Empty containers may contain product residue. Do not pressurize cut, heat, or weld empty containers. Do nct reuse empty containers without commercial cleaning or reconditioning.

LAND SPILL:

Eliminate source of ignition. Keep public away. Prevent additional discharge of material, if possible to do so without hazard.
Vapours or dust may be harmful or fatal. Warn occupants of downwind areas.
Prevent spills from entering sewers, watercourses or low areas. Contain spilled liquid with sand or earth. Do not use combustible materials such as sawdust.
Recover by pumping (use an explosion proof motor or hand pump), or by using a suitable absorbent.
Consult an expert on disposal of recovered material. Ensure disposal in compliance with government requirements and ensure conformity to local disposal regulations. Notify the appropriate authorities immediately.
Take all additional action necessary to prevent and remedy the adverse effects of the spill.

WATER SPILL:

Eliminate all sources of ignition. Vapours or dust may be harmful or fatal. Warn occupants and shipping in downwind areas.
Consult an expert on disposal of recovered material. Ensure disposal in compliance with government requirements and ensure conformity to local disposal regulations. Notify the appropriate authorities immediately.
Take all additional action necessary to prevent and remedy the adverse effects of the spill.

7. FIRE AND EXPLOSION HAZARD

Flashpoint and method: -40 deg C COC D92 less than/moins de

Autoignition: NA Flammable Limits: LEL: 1.4% UEL: 7.6%

GENERAL HAZARDS:

Extremely flammable; material will readily ignite at normal temperatures.
Flammable Liquid; may release vapours that form flammable mixtures at or above the flash point.
Toxic gases will form upon combustion.
Static Discharge; material may accumulate static charges which may cause a fire.

FIRE FIGHTING:

Use water spray to cool fire exposed surfaces and to protect personnel.
Shut off fuel to fire if possible to do so without hazard. If a leak or spill has not ignited use water spray to disperse the vapours.
Either allow fire to burn out under controlled conditions or extinguish with foam or dry chemical. Try to cover liquid spills with foam.
Respiratory and eye protection required for fire fighting personnel.
Avoid spraying water directly into storage containers due to danger of boilover.
A self-contained breathing apparatus (SCBA) should be used for all indoor fires and any significant outdoor fires. For small outdoor fires, which may easily be extinguished with a portable fire extinguisher, use of an SCBA may not be required.

HAZARDOUS COMBUSTION PRODUCTS:

Smoke, carbon monoxide, carbon dioxide under thermal decomposition.

8. REACTIVITY DATA

STABILITY:

This product is stable. Hazardous polymerization will not occur.

INCOMPATIBLE MATERIALS AND CONDITIONS TO AVOID:

Strong oxidizing agents

HAZARDOUS DECOMPOSITION:

none

9. NOTES

All components of this product are listed on the U.S. TSCA inventory.

REVISION SUMMARY:
Since 6 November 2002, this MSDS has been revised in Section(s):
3

10. PREPARATION

Date Prepared: March 19, 2003
Prepared by: Lubricants & Specialties
IMPERIAL OIL
Products Division
111 St Clair Avenue West
Toronto, Ontario
M5W 1K3
(800) 268-3183

Material Safety Data Sheet

VIBRA STOP

Material Identification and Use

ANUFACTURER'S NAME	CONTROL CHEMICAL (1989) CORPORATION
ANUFACTURER'S ADDRESS	7016 30 Street SE Calgary, Alberta, Canada T2C 1N9
MERGENCY PHONE NUMBER	(403) 720-7044
UPPLIER IDENTIFIER	
UPPLIER'S ADDRESS	
UPPLIER EMERGENCY PHONE NUMBER	
RODUCT IDENTIFIER	VIBRA STOP
RODUCT USE	Drilling Mud

Hazardous Ingredients of Materials

hemical Identity	Concentration	CAS#/NA#/UN#	LD(50)	LC(50)
ineral Spirits	7-14%	CAS 64742-47-8	(Oral, Rat) Over 8 ml/kg or >6,400 mg/kg	N/E

Physical Data For Product

HYSICAL STATE	Liquid
DOUR AND APPEARANCE	Slight oil smell, brown appearance.
DOUR THRESHOLD	N/E
PECIFIC GRAVITY	0.98
APOUR PRESSURE	N/E
APOUR DENSITY (air=1)	N/E
VAPORATION RATE	N/E
OILING POINT	N/E
REEZING POINT	-30 Degrees C
H	8-9
ENSITY (g/ml)	N/E
OEFFICIENT OF WATER/OIL DISTRIBUTION	N/E

Fire and Explosion Hazard of Product

ONDITIONS OF FLAMMABILITY	Requires a source of ignition, the presence of air, and a temperature greater than the flashpoint.
EANS OF EXTINCTION	In case of fire, foam, dry chemical, or CO2. AVOID USE OF WATER-SLIPPERY CONDITIONS WILL OCCUR.
LASHPOINT AND METHOD OF DETERMINATION	>200 degrees F
PPER EXPLOSION LIMIT(% BY VOL)	N/E

Material Safety Data Sheet

VIBRA STOP

LOWER EXPLOSION LIMIT(% BY VOL)	N/E
AUTO-IGNITION TEMPERATURE	N/E
FLAMMABILITY CLASSIFICATION	N/A
HAZARDOUS COMBUSTION PRODUCTS	CO, CO2, Oxides of sulphur produced on combustion.
EXPLOSION DATA	N/E
SENSITIVITY TO STATIC DISCHARGE	N/A

Reactivity Data

CHEMICAL STABILITY	Stable
INCOMPATIBLE MATERIALS	Oxidizing materials.
CONDITIONS OF REACTIVITY	N/A
HAZARDOUS DECOMPOSITION PRODUCTS	N/A

Toxicological Properties of Product

ROUTES OF ENTRY	
SKIN CONTACT	Contact may cause irritation, redness, swelling or dermatitis.
SKIN ABSORPTION	N/A
EYE	Will cause painful burning or stinging of eyes and lids, watering of eyes, and inflammation of conjunctiva.
INHALATION	N/A
INGESTION	May cause gastrointestinal irritation, cramps, diarrhoea.
ACUTE OVER EXPOSURE EFFECTS	N/E
CHRONIC OVER EXPOSURE EFFECTS	Skin irritation or dermatitis may occur upon frequent or prolonged contact.
EXPOSURE LIMITS	N/E
IRRITANCY OF PRODUCT	Moderate skin and eye irritant.
SENSITIZATION TO MATERIAL	N/E
CARCINOGENICITY, REPRODUCTIVE EFFECTS	N/E
TERATOGENICITY, MUTAGENICITY	N/E
TOXICOLOGICALLY SYNERGISTIC PRODUCTS	N/E

Preventive Measures

PERSONAL PROTECTIVE EQUIPMENT	Wear eye/face protection. Wear suitable gloves.
SPECIFIC ENGINEERING CONTROLS	N/A
LEAK AND SPILL PROCEDURES	CONTAIN THE SPILL. SOAK UP WITH AN ABSORBENT MATERIAL. CLEAN WITH AN ADEQUATE SOLVENT.
WASTE DISPOSAL	In accordance with Municipal, Provincial and Federal regulations.
HANDLING PROCEDURES AND EQUIPMENT	N/A
STORAGE REQUIREMENTS	STORE IN A TIGHTLY SEALED CONTAINER.
SPECIAL SHIPPING INFORMATION	None.

Material Safety Data Sheet

VIBRA STOP

First Aid Measures

SPECIFIC FIRST AID PROCEDURES	FLUSH EYES WITH WATER. RINSE CONTAMINATED SKIN WITH SOAP AND WATER. IF INGESTED, GIVE WATER. DO NOT INDUCE VOMITING. CALL A PHYSICIAN.

Preparation Date of Material Safety Data Sheet

PREPARED BY	The Safety Committee
PHONE NUMBER OF PREPARER	(403) 720-7044
DATE PREPARED	January 2, 2004

The information contained herein is based on data believed to be reliable, but is presented without guarantee or warranty & Control Chemical (1989) Corporation, disclaims any liability incurred from the use thereof.

Material Safety Data Sheet

VISCO L

Material Identification and Use

MANUFACTURER'S NAME	LUCIEN MIRAULT INC.
MANUFACTURER'S ADDRESS	697 de Campagnards Val Senneville, Quebec, Canada, J0Y 2P0
EMERGENCY PHONE NUMBER	(819) 824-6778
SUPPLIER IDENTIFIER	
SUPPLIER'S ADDRESS	
SUPPLIER EMERGENCY PHONE NUMBER	
PRODUCT IDENTIFIER	VISCO L
PRODUCT USE	Drilling Mud

Hazardous Ingredients of Materials

Chemical Identity	Concentration	CAS#/NA#/UN#	LD(50)	LC(50)
Mineral Spirits	20-40%	CAS 64742-47-8	(Oral, Rat) Over 8 ml/kg	N/E

Physical Data For Product

PHYSICAL STATE	Liquid
ODOUR AND APPEARANCE	oily smell, liquid emulsion
ODOUR THRESHOLD	N/E
SPECIFIC GRAVITY	0.98
VAPOUR PRESSURE	N/E
VAPOUR DENSITY (air=1)	N/E
EVAPORATION RATE	N/E
BOILING POINT	N/E
FREEZING POINT	N/E
pH	7.0 - 9.0 (0.6% in distilled water)
DENSITY (g/ml)	N/E
COEFFICIENT OF WATER/OIL DISTRIBUTION	N/E

Fire and Explosion Hazard of Product

CONDITIONS OF FLAMMABILITY	requires source of ignition, presense of air and temperature greater than flashpoint
MEANS OF EXTINCTION	In case of fire use water spray, foam, dry chemical, or CO2 AVOID USE OF WATER-SLIPPERY CONDITIONS WILL OCCUR.
FLASHPOINT AND METHOD OF DETERMINATION	70 c. (C.C.)
UPPER EXPLOSION LIMIT(% BY VOL)	N/E
LOWER EXPLOSION LIMIT(% BY VOL)	N/E
AUTO-IGNITION TEMPERATURE	N/E

Material Safety Data Sheet

VISCO L

FLAMMABILITY CLASSIFICATION	Combustible Liquid Class B-3
HAZARDOUS COMBUSTION PRODUCTS	Oxides of carbon or nitrogen and products of incomplete combustion.
EXPLOSION DATA	N/E
SENSITIVITY TO STATIC DISCHARGE	Potential for fire and/or explosion when used indoors.

Reactivity Data

CHEMICAL STABILITY	Stable
INCOMPATIBLE MATERIALS	Avoid strong oxidizing and reducing materials.
CONDITIONS OF REACTIVITY	Avoid contamination with reactive materials.
HAZARDOUS DECOMPOSITION PRODUCTS	N/E

Toxicological Properties of Product

ROUTES OF ENTRY	
SKIN CONTACT	May cause irritation, redness, swelling or dermititis.
SKIN ABSORPTION	N/A
EYE	Will cause painful burning or stinging of eyes and lids, watering of eyes and inflamation.
INHALATION	N/A
INGESTION	May cause nausea or vomitting.
ACUTE OVER EXPOSURE EFFECTS	N/E
CHRONIC OVER EXPOSURE EFFECTS	Skin irritation or dermatitis may occur upon frequent or prolonged contact.
EXPOSURE LIMITS	Contains traces of acrylamide, TWAEV=0.03 mg/mg3 (ONT PREG 654/86)
IRRITANCY OF PRODUCT	Skin-moderate eye-moderate
SENSITIZATION TO MATERIAL	Repeated or prolonged exposure may cause sensitization in some individuals.
CARCINOGENICITY, REPRODUCTIVE EFFECTS	N/E
TERATOGENICITY, MUTAGENICITY	N/E
TOXICOLOGICALLY SYNERGISTIC PRODUCTS	N/E

Preventive Measures

PERSONAL PROTECTIVE EQUIPMENT	Wear eye/face protection. Wear suitable gloves.
SPECIFIC ENGINEERING CONTROLS	General ventilation with a good source of make-up air recommended for all indoor situations.
LEAK AND SPILL PROCEDURES	Contain the spill, soak up with an absorbent material. Clean with an adequate solvent.
WASTE DISPOSAL	In accordance with Municipal, Provincial and Federal regulations.
HANDLING PROCEDURES AND EQUIPMENT	N/A
STORAGE REQUIREMENTS	Store in a tightly sealed container.
SPECIAL SHIPPING INFORMATION	None.

First Aid Measures

Material Safety Data Sheet

VISCO L

SPECIFIC FIRST AID PROCEDURES	FLUSH EYES WITH WATER. RINSE CONTAMINATED SKIN WITH SOAP AND WATER. IF INGESTED, GIVE WATER. DO NOT INDUCE VOMITING. CALL A PHYSICIAN. IN CASE OF DISCOMFORT BY VAPORS OR DUSTS, MOVE TO A VENTILATED AREA.

Preparation Date of Material Safety Data Sheet

PREPARED BY	Control Chemical (1989) Corporation
PHONE NUMBER OF PREPARER	(819) 824-6778
DATE PREPARED	January 2, 2004

The information contained herein is based on data believed to be reliable, but is presented without guarantee or warranty and Control Chemical (1989) Corporation disclaims any liability incurred from the use thereof.

Imperial Oil

MATERIAL SAFETY DATA SHEET

Date Prepared: May 13, 2003
Supersedes: April 07, 2000
MSDS Number: 08052

1. PRODUCT INFORMATION

Product Identifier: XD-3 EXTRA ENGINE OIL 10W-30
ESSOLUBE XD-3 EXTRA ENGINE OIL 10W-30

Application and Use:
Mineral oil for gasoline and diesel engines

Product Description:

A lubricating oil consisting of a mixture of saturated and unsaturated hydrocarbons derived from paraffinic distillate, and additives.

REGULATORY CLASSIFICATION

WHMIS:
Not a controlled product

CEPA: CANADIAN ENVIRONMENTAL PROTECTION ACT
All components of this product are either on the Domestic Substances List (DSL) or are exempt.

TDG INFORMATION (RAIL/ROAD):
Not Regulated in Canada.

Please be aware that other regulations may apply.

TELEPHONE NUMBERS		MANUFACTURER/SUPPLIER:
Emergency 24 hr.	(519) 339-2145	IMPERIAL OIL
Technical Info.	(800) 268-3183	Products Division
		111 St Clair Avenue West
		Toronto, Ontario
		M5W 1K3
		(416) 968-4441

2. REGULATED COMPONENTS

The following components are defined in accordance with sub-paragraph 13(a) (i) to (iv) or paragraph 14(a) of the Hazardous Products Act:

NAME	%	CAS #
Not applicable		

3. TYPICAL PHYSICAL & CHEMICAL PROPERTIES

Physical State: Liquid
Specific gravity: not available
Viscosity: 11.80 cSt at 100 deg C
Vapour Density: not available
Boiling Point: not available
Evaporation rate: <0.1 (1= n-butylacetate)
Solubility in water: negligible
Freezing/Pour Point: -30 deg C ASTM D97
Odour Threshold: not available
Vapour Pressure: <1 kPa at 38 deg C
Density: 0.87 g/cc at 15 deg C
Appearance/odour: Dark brown liquid, petroleum hydrocarbon odour.

4. HEALTH HAZARD INFORMATION

NATURE OF HAZARD

INHALATION:

Negligible hazard at normal temperatures (up to 38 deg C).
Elevated temperatures or mechanical action may form vapours, mists or fumes which may be irritating to the eyes, nose, throat and lungs.
Avoid breathing vapours or mists.

EYE CONTACT:

Slightly irritating, but will not injure eye tissue.

SKIN CONTACT:

Low toxicity.
Frequent or prolonged contact may irritate the skin.

INGESTION:

Low toxicity.

CHRONIC:

Prolonged and/or repeated contact with used gasoline engine oil has caused

skin cancer in experimental animals. The relationship of these results to humans has not been fully established.

ACUTE TOXICITY DATA:

Based on animal testing data from similar materials and products, the acute toxicity of this product is expected to be:

Oral	:	LD50 > 5000 mg/kg	(Rat)
Dermal	:	LD50 > 3160 mg/kg	(Rabbit)
Inhalation	:	LC50 > 5000 mg/m3	(Rat)

OCCUPATIONAL EXPOSURE LIMIT:

ACGIH recommends:
For oil mists, 5 mg/m3.

Local regulated limits may vary.

5. FIRST AID MEASURES

INHALATION:

Vapour pressure of this material is low and as such inhalation under normal conditions is usually not a problem. If overexposed to oil mist, remove from further exposure. Administer artificial respiration if breathing has stopped. Keep at rest. Call for prompt medical attention.

EYE CONTACT:

Flush eyes with large amounts of water until irritation subsides. If irritation persists, get medical attention.

SKIN CONTACT:

Flush with large amounts of water. Use soap if available.
Remove severely contaminated clothing (including shoes) and launder before reuse.
If irritation persists, seek medical attention.

INGESTION:

If swallowed, DO NOT induce vomiting. Keep at rest. Get prompt medical attention.

6. PREVENTIVE AND CORRECTIVE MEASURES

PERSONAL PROTECTION:

The selection of personal protective equipment varies, depending upon conditions of use.

In open systems where contact is likely, wear safety goggles, chemical-resistant overalls, and chemically impervious gloves.
Where only incidental contact is likely, wear safety glasses with side shields. No other special precautions are necessary provided skin/eye contact is avoided.

Where concentrations in air may exceed the occupational exposure limits given in Section 4 and where engineering, work practices or other means of exposure reduction are not adequate, approved respirators may be necessary to prevent overexposure by inhalation.

ENGINEERING CONTROLS:

The use of local exhaust ventilation is recommended to control emissions near the source. Laboratory samples should be handled in a fumehood. Provide mechanical ventilation of confined spaces.

HANDLING, STORAGE AND SHIPPING:

Keep containers closed. Handle and open containers with care.
Store in a cool, well ventilated place away from incompatible materials.
In keeping with good personal hygiene practices, wash hands thoroughly after handling the material.
Do not handle or store near an open flame, sources of heat, or sources of ignition.
Empty containers may contain product residue. Do not pressurize cut, heat, or weld empty containers. Do not reuse empty containers without commercial cleaning or reconditioning.

LAND SPILL:

Eliminate source of ignition. Keep public away. Prevent additional discharge of material, if possible to do so without hazard.
Prevent spills from entering sewers, watercourses or low areas. Contain spilled liquid with sand or earth.
Recover by pumping or by using a suitable absorbant.
Consult an expert on disposal of recovered material. Ensure disposal in compliance with government requirements and ensure conformity to local disposal regulations. Notify the appropriate authorities immediately.
Take all additional action necessary to prevent and remedy the adverse effects of the spill.

WATER SPILL:

Remove from surface by skimming or with suitable absorbents. If allowed by local authorities and environmental agencies, sinking and/or suitable dispersants may be used in unconfined waters.
Consult an expert on disposal of recovered material. Ensure disposal in compliance with government requirements and ensure conformity to local disposal regulations. Notify the appropriate authorities immediately.
Take all additional action necessary to prevent and remedy the adverse effects of the spill.

7. FIRE AND EXPLOSION HAZARD

Flashpoint and method: 200 deg C COC ASTM D92

Autoignition: 315 deg C Flammable Limits: LEL: NA UEL: NA

GENERAL HAZARDS:

Low Hazard; liquids may burn upon heating to temperatures at or above the flash point.
Toxic gases will form upon combustion.

FIRE FIGHTING:

Use water spray to cool fire exposed surfaces and to protect personnel.
Shut off fuel to fire.
Use foam, dry chemical or water spray to extinguish fire.
Respiratory and eye protection required for fire fighting personnel.
A self-contained breathing apparatus (SCBA) should be used for all indoor fires and any significant outdoor fires. For small outdoor fires, which may easily be extinguished with a portable fire extinguisher, use of an SCBA may not be required.

HAZARDOUS COMBUSTION PRODUCTS:

Fumes, smoke, carbon monoxide, sulfur oxides, nitrogen oxides, phosphorus oxides, aldehydes and other decomposition products, in the case of incomplete combustion
Various metal oxides

8. REACTIVITY DATA

STABILITY:

This product is stable. Hazardous polymerization will not occur.

INCOMPATIBLE MATERIALS AND CONDITIONS TO AVOID:

Strong oxidizing agents

HAZARDOUS DECOMPOSITION:

none

9. NOTES

All components of this product are listed on the U.S. TSCA inventory.

REVISION SUMMARY:
Since 7 April 2000, this MSDS has been revised in Section(s):
3, 7

10. PREPARATION

Date Prepared: May 13, 2003
Prepared by: Lubricants & Specialties
IMPERIAL OIL
Products Division
111 St Clair Avenue West
Toronto, Ontario
M5W 1K3
(800) 268-3183

Esso Imperial Oil

MATERIAL SAFETY DATA SHEET

Date Prepared: October 04, 2003
Supersedes: November 05, 2002
MSDS Number: 08043

1. PRODUCT INFORMATION

Product Identifier: XD-3 EXTRA ENGINE OIL 15W-40
ESSOLUBE XD-3 EXTRA ENGINE OIL 15W-40

Application and Use:
Mineral oil for gasoline and diesel engines

Product Description:

A lubricating oil consisting of a mixture of saturated and unsaturated hydrocarbons derived from paraffinic distillate, and additives.

REGULATORY CLASSIFICATION

WHMIS:
Not a controlled product

CEPA: CANADIAN ENVIRONMENTAL PROTECTION ACT
All components of this product are either on the Domestic Substances List (DSL) or are exempt.

TDG INFORMATION (RAIL/ROAD):
Not Regulated in Canada.

Please be aware that other regulations may apply.

TELEPHONE NUMBERS		MANUFACTURER/SUPPLIER:
Emergency 24 hr.	(519) 339-2145	IMPERIAL OIL
Technical Info.	(800) 268-3183	Products Division
		111 St Clair Avenue West
		Toronto, Ontario
		M5W 1K3
		(416) 968-4441

2. REGULATED COMPONENTS

The following components are defined in accordance with sub-paragraph 13(a) (i) to (iv) or paragraph 14(a) of the Hazardous Products Act:

NAME	%	CAS #
Not applicable		

3. TYPICAL PHYSICAL & CHEMICAL PROPERTIES

Physical State: Liquid
Specific gravity: not available
Viscosity: 15.00 cSt at 100 deg C
Vapour Density: not available
Boiling Point: 310 to 600 deg C
Evaporation rate: <1 (1= n-butylacetate)
Solubility in water: negligible
Freezing/Pour Point: -27 deg C ASTM D97
Odour Threshold: not available
Vapour Pressure: <1 kPa at 38 deg C
Density: 0.88 g/cc at 15 deg C
Appearance/odour: Dark brown liquid, petroleum hydrocarbon odour.

4. HEALTH HAZARD INFORMATION

NATURE OF HAZARD

INHALATION:

Negligible hazard at normal temperatures (up to 38 deg C).
Elevated temperatures or mechanical action may form vapours, mists or fumes which may be irritating to the eyes, nose, throat and lungs.
Avoid breathing vapours or mists.

EYE CONTACT:

Slightly irritating, but will not injure eye tissue.

SKIN CONTACT:

Low toxicity.
Frequent or prolonged contact may irritate the skin.

INGESTION:

Low toxicity.

CHRONIC:

Prolonged and/or repeated contact with used gasoline engine oil has caused

skin cancer in experimental animals. The relationship of these results to humans has not been fully established.

ACUTE TOXICITY DATA:

Based on animal testing data from similar materials and products, the acute toxicity of this product is expected to be:

Oral	:	LD50 > 5000 mg/kg	(Rat)
Dermal	:	LD50 > 3160 mg/kg	(Rabbit)
Inhalation	:	LC50 > 5000 mg/m3	(Rat)

OCCUPATIONAL EXPOSURE LIMIT:

ACGIH recommends:
For oil mists, 5 mg/m3.

Local regulated limits may vary.

5. FIRST AID MEASURES

INHALATION:

Vapour pressure of this material is low and as such inhalation under normal conditions is usually not a problem. If overexposed to oil mist, remove from further exposure. Administer artificial respiration if breathing has stopped. Keep at rest. Call for prompt medical attention.

EYE CONTACT:

Flush eyes with large amounts of water until irritation subsides. If irritation persists, get medical attention.

SKIN CONTACT:

Flush with large amounts of water. Use soap if available.
Remove severely contaminated clothing (including shoes) and launder before reuse.
If irritation persists, seek medical attention.

INGESTION:

If swallowed, DO NOT induce vomiting. Keep at rest. Get prompt medical attention.

6. PREVENTIVE AND CORRECTIVE MEASURES

PERSONAL PROTECTION:

The selection of personal protective equipment varies, depending upon conditions of use.