



# MATERIAL SAFETY DATA SHEET

## SECTION 1 - PRODUCT IDENTIFICATION AND USE

**Product Name:** IDO Heavy Duty Extended Life Diesel Coolant  
**Product Class:** Permanent antifreeze/Summer Coolant.  
**WHMIS Classification:** Class D2B - Toxic Material

**Supplier Name and Address:** Irving Oil  
10 Sydney Street  
Saint John, N.B.  
E2L 4K1

**Phone:** (506) 632-2000  
**Emergency:** (506) 648-3060

## SECTION 2 - HAZARDOUS INGREDIENTS OF MATERIALS

<u>Hazardous Ingredients</u>	<u>CAS#</u>	<u>wt%</u>	<u>ACGIH-TLV</u>	<u>LC<sub>50</sub></u>	<u>LD<sub>50</sub></u>
Ethylene Glycol	107-21-1	90-98	Ceil: 100 ppm from ACGIH (Canada 1999)		Oral: 4700 mg/kg (Rat) Skin: 9530 mg/kg (Rabbit)
Sodium Benzoate	532-32-1	1-5	Not Available		

## SECTION 3 - PHYSICAL DATA AND CHEMICAL PROPERTIES

<b>Form:</b>	Liquid.	<b>Vapour Pressure(@20°C):</b>	2.1
<b>Colour:</b>	Yellow	<b>Vapour Density (Air = 1):</b>	2.1
<b>Odour:</b>	N/A.	<b>Freezing Point (°C):</b>	- 13C (8.6F)
<b>Specific Gravity @ 15°C:</b>	1.115-1.145	<b>Boiling Point (°C @760 mm Hg):</b>	197 C (386.6F)
<b>Solubility in Water:</b>	Complete	<b>Evaporation Rate:</b>	< 1
<b>Volatile content (%vol):</b>	N/A		

## SECTION 4 - FIRE AND EXPLOSION HAZARD

**Flammability:**  Yes  No  
**Flash Point :** cc-116.1C (241F)

**Conditions:** Open flame above flash point.

**Upper Flammable Limit:** 15.3% (calculated)  
**Auto Ignition Temperature:** Not applicable.  
**Sensitivity to Impact:** Not established.

**Lower Flammable Limit:** 3.2%  
**TDG Flammability Classification:** Not classified.  
**Sensitivity to Static Discharge:** Not established.

**Means of Extinction:** Water, fog, Carbon dioxide, dry chemical, or alcohol foam.  
**Hazardous Combustion Products:** Oxides of carbon.  
**Special Procedures:** Wear self-contained breathing apparatus when fighting fire. Use water to cool fire-exposed containers. A solid stream of water directed into hot burning liquid can cause frothing.

## SECTION 5 - REACTIVITY DATA

**Stability:** This product is stable.  
**Hazardous Polymerisation:** Will not occur.  
**Conditions to avoid:** Excessive heat.  
**Incompatibility with other substances:** Strong oxidising agents.  
**Hazardous decomposition products:** Thermal decomposition; oxides of carbon.



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## SECTION 6 - TOXICOLOGICAL PROPERTIES

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**Route of Entry:** Eye Skin Contact    Skin Absorption    Inhalation    Ingestion

**Effects of Acute Exposure:** Irritating to eyes and skin. Inhalation irritates nose and throat. High vapour concentration causes nausea, vomiting and headaches. Exposure to high concentration from heated antifreeze coolant or exposure to mists may produce nausea, vomiting, headache, dizziness and irregular eye movements. Ingestion causes abdominal discomfort or pain, dizziness, lumbar pain, oliguria, uraemia and central nervous system depression. Ingestion of large volumes cause kidney damage and can be fatal.

**Effects of Chronic Exposure:** Slightly toxic on prolonged or repeated skin contact.

**Exposure Limits:** 50 ppm (vapour or mist)

**Carcinogenicity:** Not determined.

**Reproductive Toxicity:** Not determined.

**Teratogenicity:** Not determined.

**Irritancy of Product:** Irritation to eyes and skin may occur.

**Mutagenicity:** Not determined.

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## SECTION 7 - PREVENTATIVE AND CORRECTIVE MEASURES

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**Personal Protective Equipment:**

<i>Gloves:</i>	Gloves (impervious).
<i>Eye:</i>	Splash Goggles
<i>Respiratory:</i>	Wear appropriate respirator when ventilation is inadequate
<i>Footwear:</i>	No special requirements under normal conditions.
<i>Clothing:</i>	No special requirements under normal conditions. Wear chemical resistant pants and jacket if in risk of skin exposure.
<i>Other:</i>	

**Engineering Controls:** Provide adequate ventilation, mechanical or other.

**Leak and Spill Procedure:** Contain spills with dikes or absorbent material. Prevent from entering sewers or water courses. Clean up or absorb for salvage or disposal.

**Waste Disposal:** Consult local authorities.

**Storage Requirements:** Keep containers closed.

**Special Shipping Information:** None.

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## SECTION 8 - FIRST AID MEASURES

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**Inhalation:** Remove to fresh air or give artificial respiration. If breathing is difficult, give oxygen and seek medical attention.

**Ingestion:** Give two glasses of water or milk if conscious, then induce vomiting. Seek medical attention immediately.

**Eye:** Flush with water for 15 minutes.

**Skin:** Wash contaminated area with soap and water. Clean contaminated clothing before wearing again.

**General Advice:** Follow good work/hygiene practices.

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## SECTION 9 - PREPARATION DATE OF MSDS

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**MSDS Prepared by:**

Irving Lubricants

**Phone:**

(506) 632-7000

**MSDS Date:** February 14, 2007

**Revision:** 03