

Technical Data

Imperial 50/50 Extended-Life Antifreeze Heavy Duty Diesel & Gasoline All Season Coolant

Description: A premium quality, silicate, nitrate, amine, borate and phosphate free, ethylene glycol based antifreeze blended with deionized water that contains a patented carboxylate inhibitor additive package, designed to produce an **Extended Life** product with an expected life of 5 years or 150,000 miles in automotive applications and 6 years or 300,000 miles in heavy-duty applications. An approved Extender may be added at 300,000 miles to extend the useful life of Imperial Extended-Life Antifreeze to 600,000 miles.

Performance: Meets ASTM D3306 D4340, E202, SAE J1034, Federal A-A-870 & O-A-548 and General Motors 1825M as well as General Motors 6277-M. Also meets or exceeds FORD ESE-M 97B44D, ASTM D-4985, ASTM D-6210, SAE J1941, Cummings 90TB-4, General Motors 1899M, TMC RP329 and Caterpillar EC-1 for heavy-duty diesel long life applications.

Applications: **Imperial Universal 50/50EXL** engine coolant is a mixture of 50% ethylene glycol and 50% deionized water designed to be compatible with and meets the specifications for most automotive applications that require a "long life" antifreeze/coolant with the carboxylate class of chemistry. It is a pre-diluted product. Recommended for heavy-duty diesel, passenger cars and light commercial vehicle engines where enhanced protection is a requirement. It is acceptable for use in aluminum heat-rejecting surfaces and cast iron engines.

Typical Properties:	Appearance	Red
	Freezing Protection, °C (F) 50% (1 Part A/F 1 Part Water)	-34 (-37)
	Silicate as Silicon Chloride Ion	<125PPM <20PPM
	Total Glycol's,Wt. % Water, Wt. %	45.0 Min. 55.0 Max.
	Specific Gravity, 60/60 °F	1.065

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER(S): IMPERIAL EXTENDED LIFE 50/50 ANTIFREEZE

COMPANY IDENTIFICATION

International Petroleum Products
& Additives Company, Inc (IPAC)
11875 Dublin Blvd. Suite A-201
Dublin, CA 94568

EMERGENCY TELEPHONE NUMBERS

HEALTH (24 hr): (925) 556-5530

PRODUCT INFORMATION: MSDS Requests: (925) 556-5530
Environmental, Safety, & Health Info.: (925) 556-5530
Product Information(925) 556-5530

2. COMPOSITION/INFORMATION ON INGREDIENTS

IPAC IMPERIAL EXTENDED LIFE 50/50 ANTIFREEZE

COMPONENTS	AMOUNT	LIMIT/QTY	AGENCY/TYPE
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A. Principal Component: Weight % CAS No.

* Ethylene Glycol	48-50		107-21-1
Diethylene Glycol	2- 0		111-46-6
Water	50%		

* Chemicals subject to reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part C72.

B. Precautionary Labels and Statements

Caution: Keep away from heat and strong oxidizing agents.

Since emptied containers contain product residue, follow label warnings even after container is emptied.

3. PHYSICAL DATA

-- Appearance: Distinctive red-orange color
-- Boiling Point: 265° F (in closed coolant system w/ 15° pressure cap)
-- Specific Gravity: 1.0626
-- Vapor Pressure: 0.04
-- Solubility in Water: Appreciable

Revision Number: 1.0**Revision Date: NOV-04****MSDS Number: 00001****NDA - No Data Available****NA - Not Applicable**

4. FIRE AND EXPLOSION HAZARD DATA

FLAMMABLE PROPERTIES**FLASH POINT:** 245° F TOC**FLAMMABILITY LIMITS** LEL 1.5 UEL Not Determined**EXTINGUISHING MEDIA:**Dry chemical, CO₂, Dry Chemical, Foam, Water Fog**SPECIAL FIRE FIGHTING INSTRUCTIONS:**

Wear self-contained breathing apparatus and protective clothing with full facepiece. Unusual Fire and Explosion Hazards: None Known.

5. REACTIVITY

- Stability: Stable, however, avoid contact with strong oxidizing agents.
- Incompatibility: None Known
- Hazardous Decomposition Products: Combustion will produce Carbon Dioxide and probably Carbon Monoxide.
- Hazardous Polymerization: Will Not Occur.

6. HEALTH

A. Exposure Limits

- Threshold Limit Values (TLV): 100 ppm (vapor)
- OSHA Permissible Exposure Limit (PEL): Not Established.

B. Exposure Effects

- Inhalation: Very toxic in particulate form upon inhalation.
- Eyes: Low hazard for usual handling. Contact with eyes could cause irritation.
- Skin: Low hazard with usual handling. Prolonged contact with skin could cause irritation.
- Ingestion: Oral induction can cause initial Central nervous system stimulation followed by depression. Later, it causes kidney damage, which can terminate fatally. Lethal dose for human reported to be 100 ml.

C. First Aid

- Eyes: Any material that contacts the eye should be washed out immediately and medical attention obtained if any systems are present after washing.
- Inhalation: Remove to fresh air and consult medical personnel.
- Ingestion: Give two glasses of water and induce vomiting. Consult medical personnel.

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7. VENTILATION AND PERSONAL PROTECTION

- A. Ventilation
Good ventilation should be sufficient to control airborne levels. Supplementary local exhaust ventilation may be needed in special circumstances, such as poorly ventilated spaces, spraying and heating, etc.
- B. Respiratory Protection
If respiratory protection is needed and appropriate NIOSH-approved respirator for organic vapor should be worn.
- C. Skin and Eye Protection
Wear safety glasses with side shields or goggles. A face shield is recommended. An eye bath should be available. Wash thoroughly after handling. Good hygiene practice should be followed which includes minimizing skin contact.

8. SPECIAL STORAGE AND HANDLING

Keep from contact with strong oxidizing agents and extreme heat in excess of 300C. Since emptied containers retain product residue, follow product label warnings even after Container is emptied.

9. SPILL, LEAK and DISPOSAL PRACTICES

Steps to be taken in case material is released or spilled: Small spills may be collected with absorbent materials. For larger spills, flush area with water spray. Prevent runoff from entering drains, sewers or streams.

Waste Disposal Method: Dispose of observing all Federal, State, and Local Laws

10. TRANSPORTAION

DOT Hazard Classification: OTHER REGULATED SUBSTANCES, N.O.S.
(CONTAINS ETHYLENE GLYCOL)
9, NA 3082, PGIII
RQ, GUIDE 31
ANTI-FREEZE

THIS ONLY APPLIES TO QUANTITIES OF 5000 POUNDS OR MORE OF ETHYLENE GLYCOL CONCENTRATION.

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NA - Not Applicable

MATERIAL SAFETY DATA SHEET

Section I: Manufacturer

Moltan Company
7125 Riverdale Bend Road
Memphis, TN 38125-4442

Customer Service: Extension 113

800-264-5826 • 901-755-5666
Fax • 901-757-0546

Material Name: SelectSorb Oil Absorbent

Prepared: May 24, 2006

Chemical Name: Kieselguhr, Diatomite

Section II: Hazardous Ingredients/Identity Information

<u>Ingredient</u>	<u>CAS Number</u>	<u>Approx. %</u>	<u>Exposure Limit</u>
Diatomaceous Earth	61790-53-2	99.00	10mg/m ₃ (total dust) 3mg/m ₃ (respirable dust)
Crystalline Silica (Quartz) .0005% respirable	14808-60-7	<1	PEL: 5mg/m ₃ % SiO ₂ +2TWA TLV: 0.1mg/m ₃ TWA
Cristobolite	14464-46-1	<1	PEL: 5mg/m ₃ % SiO ₂ +2TWA TLV: 0.05mg/m ₃ TWA

Section III: Physical / Chemical Characteristics

Boiling Point	N/A	Specific Gravity (Water=1)	2.22
Vapor Pressure (mm Hg)	N/A	Melting Point	N/A
Vapor Density (Air = 1)	N/A	Evaporation Rate	N/A
Solubility in Water	<2.0%	Appearance & Odor:	Tan to white, odorless, granular

Section IV: Fire & Explosion Hazard Data

Flash Point	N/A	Flammable Limits	N/A
Extinguishing Media	N/A	LEL	N/A
Special Fire Fighting Procedures:	None	Unusual Fire & Explosion Hazards:	None
		UEL	N/A

Section V: Reactivity Data

Stability: Stable; Hazardous Polymerization: Will not occur; Hazardous decomposition products: None
Incompatibility: Hydrofluoric acid may react violently with the product.