

ASHLAND OIL VALVOLINE -- PYROIL WINDSHIELD DE-ICER DI 11.5  
MATERIAL SAFETY DATA SHEET  
NSN: 683000F034206  
Manufacturer's CAGE: 9T904  
Part No. Indicator: A  
Part Number/Trade Name: PYROIL WINDSHIELD DE-ICER DI 11.5

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General Information  
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Company's Name: ASHLAND OIL INC VALVOLINE INC  
Company's Street: 2900 PALUMBO DR  
Company's P. O. Box: 14000  
Company's City: LEXINGTON  
Company's State: KY  
Company's Country: US  
Company's Zip Code: 40509-1253  
Company's Emerg Ph #: 800-274-5263  
Company's Info Ph #: 606-264-7000  
Record No. For Safety Entry: 001  
Tot Safety Entries This Stk#: 001  
Status: SE  
Date MSDS Prepared: 20NOV90  
Safety Data Review Date: 18APR94  
Preparer's Company: ASHLAND OIL INC VALVOLINE INC  
Preparer's St Or P. O. Box: 2900 PALUMBO DR  
Preparer's City: LEXINGTON  
Preparer's State: KY  
Preparer's Zip Code: 40509-1253  
MSDS Serial Number: BTNDS

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Ingredients/Identity Information  
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Proprietary: NO  
Ingredient: CARBON DIOXIDE  
Ingredient Sequence Number: 01  
Percent: 1-10  
NIOSH (RTECS) Number: FF6400000  
CAS Number: 124-38-9  
OSHA PEL: 5000 PPM  
ACGIH TLV: 9000 MG/CUM  
Other Recommended Limit: 10000 PPM

Proprietary: NO  
Ingredient: METHANOL (METHYL ALCOHOL), COLUMBIAN SPIRITS  
Ingredient Sequence Number: 02  
Percent: 55-70  
NIOSH (RTECS) Number: PC1400000  
CAS Number: 67-56-1  
OSHA PEL: 260 MG/CUM  
ACGIH TLV: 262 MG/CUM (SKIN)  
Other Recommended Limit: 200 PPM

Proprietary: NO  
Ingredient: ETHYLENE GLYCOL, GLYCOL  
Ingredient Sequence Number: 03  
Percent: 5-10  
NIOSH (RTECS) Number: KW2975000  
CAS Number: 107-21-1  
ACGIH TLV: C 127 MG/CUM  
Other Recommended Limit: 10 MG/CUM

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Physical/Chemical Characteristics  
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Appearance And Odor: CLEAR LIQUID, HOMOG SOLN  
Vapor Density (Air=1): >1  
Specific Gravity: 0.83-0.84  
Evaporation Rate And Ref: SLOWER THAN ETHER  
Percent Volatiles By Volume: 85-100

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Fire and Explosion Hazard Data

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Flash Point: 69F/20.6C  
Flash Point Method: TCC  
Lower Explosive Limit: 3.2  
Extinguishing Media: WATER FOG, ALCOHOL FOAM  
Special Fire Fighting Proc: WEAR SCBA W/FULL FACEPIECE OPERATED IN POSITIVE PRESSURE DEMAND MODE WHEN FIGHTING FIRES.  
Unusual Fire And Expl Hazrds: NEVER USE WELING/CUTTING TORCH ON/NEAR DRUM (EVEN EMPTY) PRODUCT RESIDUE CAN IGNITE. VAPORS ARE HEAVIER THAN AIR/MAY TRAVEL TO IGNITION SOURCES.

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Reactivity Data

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Stability: YES  
Cond To Avoid (Stability): IGNITION SOURCES  
Materials To Avoid: STRONG OXIDIZING AGENTS  
Hazardous Decomp Products: CO, CO2  
Hazardous Poly Occur: NO

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Health Hazard Data

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Route Of Entry - Inhalation: YES  
Route Of Entry - Skin: YES  
Route Of Entry - Ingestion: YES  
Health Haz Acute And Chronic: EYES: SEVERE IRRITATION. SKIN: MODERATE IRRITATION/DERMATITIS. INHALATION: NASAL/RESPIRATORY IRRITATION/CNS EFFECTS/DEATH. INGESTION: GI IRRITATION/DEATH.  
Carcinogenicity - NTP: NO  
Carcinogenicity - IARC: NO  
Carcinogenicity - OSHA: NO  
Explanation Carcinogenicity: NONE  
Signs/Symptoms Of Overexp: REDNESS, TEARING, BLURRED VISION, DEFATTING, DIZZINESS, WEAKNESS, FATIGUE, NAUSEA, HEADACHE, POSSIBLE UNCONSCIOUSNESS, VOMITING, DIARRHEA, BLINDNESS, IRRITATION.  
Emergency/First Aid Proc: SKIN: WASH AREA W/SOAP & WATER. EYES: FLUSH W/PLENTY OF WATER. INGEST: DRINK 2 GLASSES OF WATER/INDUCE VOMITING BY GIVING IPECAC SYRUP/BY PLACING FINGER AT BACK OF THROAT. NEVER GIVE ANYTHING BY MOUTH TO UNCONSCIOUS PERSON. INHALE: REMOVE TO FRESH AIR. GIVE OXYGEN/CPR IF NECESSARY. KEEP QUIET/WARM. OBTAIN MEDICAL ATTENTION IN ALL CASES. NOTE TO PHYSICIAN: PRODUCT CONTAINS ETHYLENE GLYCOL. SEE SUPP

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Precautions for Safe Handling and Use

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Steps If Matl Released/Spill: SMALL: ABSORB ON VERMICULITE/OTHER ABSORBENT MATERIAL/TRANSFER TO HOOD. LARGE: ELIMINATE IGNITION SOURCES. WEAR PROTECTIVE CLOTHING. PREVENT FROM ENTERING WATER WAYS. PUMP/VACUUM TRANSFER PRODUCT TO CLEAN CONTAINERS. TRANSFER TO CONTAINER FOR DISPOSAL.  
Waste Disposal Method: SMALL: ALLOW TO EVAPORATE IN HOOD. LARGE: DESTROY LIQUID BY INCINERATION. DISPOSE OF IN ACCORDANCE W/FEDERAL, STATE & LOCAL REGULATIONS.  
Precautions-Handling/Storing: CONTAINERS MAY BE HAZARDOUS WHEN EMPTIED. CONTAINERS MAY CONTAIN PRODUCT RESIDUE, ALL HAZARD PRECAUTIONS MUST BE OBSERVED.  
Other Precautions: NOTE TO PHYSICIAN: CONTAINS METHANOL. METHANOL IS METABOLIZED TO FORMALDEHYDE/FORMIC ACID. THESE METABOLITES MAY CAUSE METABOLIC ACIDOSIS. USE ETHANOL AS ANTIDOTE.

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## Control Measures

Work Hygienic Practices: REMOVE/LAUNDER CONTAMINATED CLOTHING BEFORE REUSE. DISCARD SHOES SATURATED W/THIS PRODUCT.  
Suppl. Safety & Health Data: NOTE TO PHYSICIAN CON'D: ETHANOL REDUCES METABOLISM OF ETHYLENE GLYCOL TO TOXIC METABOLITES. ETHANOL SHOULD BE ADMINISTERED IN SEVERE POISONING SINCE THE ELIMINATED HALF-LIFE OF ETHYLENE GLYCOL IS 3 HOURS. IF MEDICAL CARE IS DELAYED, USE 3-4, 1 OUNCE ORAL "SHOTS" OF 86-PROOF WHISKEY.

## Transportation Data

## Disposal Data

## Label Data

Label Required: YES  
Technical Review Date: 18APR94  
Label Date: 18APR94  
Label Status: F  
Common Name: PYROIL WINDSHIELD DE-ICER DI 11.5  
Chronic Hazard: YES  
Signal Word: DANGER!  
Acute Health Hazard-Severe: X  
Contact Hazard-Severe: X  
Fire Hazard-Severe: X  
Reactivity Hazard-None: X  
Special Hazard Precautions: EYES: SEVERE IRRITATION. SKIN: MODERATE IRRITATION/DERMATITIS. INHALATION: NASAL/RESPIRATORY IRRITATION/CNS EFFECTS/DEATH. INGESTION: GI IRRITATION/DEATH. TARGET ORGANS: EYES, SKIN, CNS, GI & RESPIRATORY TRACTS. IC ACID.  
Label Name: ASHLAND OIL INC VALVOLINE INC  
Label Street: 2900 PALUMBO DR  
Label P.O. Box: 14000  
Label City: LEXINGTON  
Label State: KY  
Label Zip Code: 40509-1253  
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Year Procured: UNK