

VALVOLINE OIL SUBSIDIARY OF ASHLAND OIL -- 20-9517 FREON 12 -
DICHLORODIFLUOROMETHANE, TECHNICAL
MATERIAL SAFETY DATA SHEET
VALVOLINE OIL SUBSIDIARY OF ASHLAND OILNSN: 6830001061656
Manufacturer's CAGE: 72527
Part No. Indicator: A
Part Number/Trade Name: 20-9517 FREON 12

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General Information
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Item Name: DICHLORODIFLUOROMETHANE, TECHNICAL
Company's Name: VALVOLINE OIL CO SUBSIDIARY OF ASHLAND OIL INC.
Company's Street: 200 E MAIN ST
Company's P. O. Box: 14000
Company's City: LEXINGTON
Company's State: KY
Company's Country: US
Company's Zip Code: 40512
Company's Emerg Ph #: 800-ASHLAND/800-274-5263
Company's Info Ph #: 606-264-7000/7616; FAX 601-429-0537
Distributor/Vendor # 1: BALKAMP INC (317-248-0760)
Distributor/Vendor # 1 Cage: 70842
Distributor/Vendor # 2: NATIONAL AUTOMOTIVE PARTS ASSN/NAPA/
Distributor/Vendor # 2 Cage: 050Q3
Record No. For Safety Entry: 016
Tot Safety Entries This Stk#: 017
Status: SE
Date MSDS Prepared: 21AUG89
Safety Data Review Date: 03FEB97
Supply Item Manager: CX
Preparer's Company: (DATA SHEET #:0016534-005)
MSDS Serial Number: CCMNQ
Specification Number: BB-F-1421
Spec Type, Grade, Class: 12 TYPE
Hazard Characteristic Code: G3
Unit Of Issue: CY
Unit Of Issue Container Qty: 50 LBS
Type Of Container: DISPO CYLNDER
Net Unit Weight: 50 LBS

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Ingredients/Identity Information
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Proprietary: NO
Ingredient: DICHLORODIFLUOROMETHANE (SARA 313) (CERCLA)
Ingredient Sequence Number: 01
Percent: >95
NIOSH (RTECS) Number: PA8200000
CAS Number: 75-71-8
OSHA PEL: 1000 PPM
ACGIH TLV: 1000 PPM; 9596
Other Recommended Limit: NONE RECOMMENDED

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Physical/Chemical Characteristics
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Appearance And Odor: CLEAR, COLORLESS GAS, HOMOG SOLN.
Boiling Point: -22F, -30C
Melting Point: NP

Vapor Pressure (MM Hg/70 F): 4700MM@77F
Vapor Density (Air=1): 4.3
Specific Gravity: 1.310 @77F
Decomposition Temperature: NP
Evaporation Rate And Ref: FASTER THAN ETHER.
Solubility In Water: NP
Percent Volatiles By Volume: 100
Viscosity: NP
pH: NP
Corrosion Rate (IPY): NP
Autoignition Temperature: NP

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Fire and Explosion Hazard Data
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Flash Point: NOT APPLICABLE
Lower Explosive Limit: NA
Upper Explosive Limit: NA
Extinguishing Media: NONE SPECIFIED BY MANUFACTURER. HMIS:USE APPROPRIATE
FIRE EXTINGUISHING MEDIA FOR SURROUNDING FIRE/MATLS.
Special Fire Fighting Proc: WEAR SCBA W/FULL FACEPIECE OPERATED IN
POSITIVE PRESSURE DEMAND MODE WHEN FIGHTING FIRES.
Unusual Fire And Expl Hazrds: NOT APPLICABLE

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Reactivity Data
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Stability: YES
Cond To Avoid (Stability): NONE SPECIFIED BY MANUFACTURER.
Materials To Avoid: AVOID CONTACT W/ALKALI METALS, POWDERED METALS,
ALKALINE METALS.
Hazardous Decomp Products: MAY FORM TOXIC MATLS:HYDROGEN CHLORIDE,
PHOSGENE, HYDROGEN FLUORIDE, ETC.
Hazardous Poly Occur: NO
Conditions To Avoid (Poly): NOT APPLICABLE

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Health Hazard Data
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LD50-LC50 Mixture: TLV:1000 PPM.
Route Of Entry - Inhalation: YES
Route Of Entry - Skin: YES
Route Of Entry - Ingestion: NO
Health Haz Acute And Chronic: EYE:CAN CAUSE SEVERE IRRIT, REDNESS, TEARING,
BLURRED VISION. SKIN: CONTACT W/LIQUID CAN RESULT IN FREEZING OF TISSUE.
BREATH: EXCESSIVE VAP INHAL CAN CAUSE NASAL/RESP IRRIT, CNS EFFECTS INCLUDING
DIZZ, WEAK, FTG, NAU, HEAD, POSSIBLE UNCONSC, EVEN DEATH. INGEST: CAN CAUSE
GASTROINTESTINAL IRRIT, NAU, VOMIT, DIARRHEA.
Carcinogenicity - NTP: NO
Carcinogenicity - IARC: NO
Carcinogenicity - OSHA: NO
Signs/Symptoms Of Overexp: SEVERE EYE IRRIT, REDNESS, TEARING, BLURRED
VISION. FREEZING OF TISSUES. NASAL/RESPIRATORY IRRIT, CNS EFFECTS-DIZZINESS,
WEAKNESS, FTG, NAU, HEADACHE, POSSIBLE UNCONSC, DEATH. GASTROINTESTINAL IRRIT,
NAU, VOMIT, DIARRHEA.
Med Cond Aggravated By Exp: NONE SPECIFIED BY MANUFACTURER.
Emergency/First Aid Proc: SKIN: SLOWLY WARM AFFECTED AREA W/TEPID WATER. GET
MED ATTN. EYE: FLUSH W/LG AMTS OF WATER LIFTING UPPER/LOWER LIDS
OCCASIONALLY. GET MED ATTN. INGEST: DO NOT INDUCE VOMIT. KEEP PERSON WARM/
QUIET. GET MED ATTN. INHAL: REMOVE TO FRESH AIR. BREATH DIFFI ADMIN OXY; BREATH

STOP GIVE ART RESP.KEEP WARM/QUIET.GET MED ATTN.DO NOT GIVE STIMULANTS.
EPINEPHRINE OR EPHEDRINE MAY ADVERSELY AFFECT THE HEART W/FATAL RESULTS.

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Precautions for Safe Handling and Use

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Steps If Matl Released/Spill: SM:VENTILATE AREA.ALLOW TO EVAPORTE.LG:ALLOW TO EVAPORATE.PERSON NOT WEARING PROT EQPMT SHOULD BE EXCLUDED FROM AREA TIL REPAIRED.

Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.

Waste Disposal Method: CHEM SUBJ TO REPORTING REQMTS OF SEC 313 SARA TITLE III. SM SPILL:ALLOW MATERIAL TO EVAPORTE.LG SPILL:RETURN TO SUPPLIER FOR RECLAMATION. HMIS:FOLLOW ALL APPLICABLE FED/STATE/LOC REGS.

Precautions-Handling/Storing: CNTNR OF THIS MATL MAY BE HAZ WHEN EMPTIED SINCE THEY RETAIN PROD RESIDUE(VAP,LIQ,SOLID).ALL HAZ PRECAUTION GIVEN IN MSDS MUST BE OBSERVED.

Other Precautions: NONE SPECIFIED BY MANUFACTURER.

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Control Measures

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Respiratory Protection: WORKPLACE EXPO PROD/COMPONENT LIMITS EXCEEDED, NIOSH/MSHA APPROVE AIR SUPPLIED RESP ADVISED IN ABSENCE OF PROPER ENVIRO CNTRL.OSHA REGS PERMIT OTHER NIOSH/MSHA RESP UNDER SPEC CONDITIONS.(SEE SAF EQPMT SUPPLIER).IMPLEMENT ENGIN/ADMIN CNTRL.

Ventilation: PROIVDE SUFFICIENT MECHANICAL(GEN &/OR LOC EXHAUST) VENTILATION TO MAINTAIN EXPO BELOW TLVS.

Protective Gloves: RESISTANT GLOVES:POLYVINYL ALCOHOL.

Eye Protection: CHEM SPLASH GOGG,OTHER OSHA TYPE GLASSES

Other Protective Equipment: NORMAL WORK CLOHTING COVERING ARMS/LEGS.

Work Hygienic Practices: WASH CONTAMIN CLOTH BEF REUSE.

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Transportation Data

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Trans Data Review Date: 97034

DOT PSN Code: DQQ

DOT Proper Shipping Name: COMPRESSED GASES, N.O.S.

DOT Class: 2.2

DOT ID Number: UN1956

DOT Label: NONFLAMMABLE GAS

IMO PSN Code: EQH

IMO Proper Shipping Name: COMPRESSED GAS, N.O.S. o

IMO Regulations Page Number: 2124

IMO UN Number: 1956

IMO UN Class: 2(2.2)

IMO Subsidiary Risk Label: -

IATA PSN Code: HDO

IATA UN ID Number: 1956

IATA Proper Shipping Name: COMPRESSED GAS, N.O.S. *

IATA UN Class: 2.2

IATA Label: NON-FLAMMABLE GAS

AFI PSN Code: HDO

AFI Prop. Shipping Name: COMPRESSED GAS, N.O.S.

AFI Class: 2.2

AFI ID Number: UN1956

AFI Basic Pac Ref: A6.3,A6.5,A6.7

N.O.S. Shipping Name: DICHLORODIFLUOROMETHANE.

Additional Trans Data: PER MSDS:DOT HAZ CLASSIFICATION:NON-FLAMM COMPRESSED GAS (1173.300).

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Disposal Data
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Label Data
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Label Required: YES
Technical Review Date: 03FEB97
Label Status: F
Common Name: 20-9517 FREON 12
Chronic Hazard: YES
Signal Word: WARNING!
Acute Health Hazard-Moderate: X
Contact Hazard-Moderate: X
Fire Hazard-None: X
Reactivity Hazard-None: X
CONTACT W/LIQUID CAN RESULT IN FREEZING OF TISSUE.BREATH:EXCESSIVE VAP
INHAL NASAL/RESP IRRIT,CNS EFFECTS-DIZZ,WEAK,FTG,NAU,HEAD,UNCONSC,DEATH.
INGEST:GI IRRIT,NAU,VOMIT,DIARR.1ST AID:SKIN:SLOWLY WARM AFFECTED AREA W/
TEPID WATER.GET MED ATTN.EYE:FLUSH W/LOTS OF WATER;LIFT LIDS.GET MED ATTN.
INGEST:DO NOT INDUCE VOMIT.KEEP PERSON WARM/QUIET.GET MED ATTN.INHAL:REMOVE
TO FRESH AIR.BREATH DIFFI ADMIN OXY;BREATH STOP GIVE ART RESP.KEEP WARM/
QUIET.GET MED ATTN.DO NOT GIVE STIMULANTS.EPINEPHRINE OR EPHEDRINE MAY
ADVERSELY AFFECT THE HEART W/FATAL RESULTS.TARGET ORGANS:TISSUES,EYE,SKIN,
CNS.
Protect Eye: Y
Protect Skin: Y
Protect Respiratory: Y
Label Name: VALVOLINE OIL CO SUBSIDIARY OF ASHLAND OIL
INC.
Label Street: 200 E MAIN ST
Label P.O. Box: 14000
Label City: LEXINGTON
Label State: KY
Label Zip Code: 40512
Label Country: US
Label Emergency Number: 800-ASHLAND/800-274-5263