

VALVOLINE -- PYROIL SUVA TRANS A-C 15 LB CYLINDER
MATERIAL SAFETY DATA SHEET
NSN: 915000N083378
Manufacturer's CAGE: 72527
Part No. Indicator: A
Part Number/Trade Name: PYROIL SUVA TRANS A/C 15 LB CYLINDER

General Information

Company's Name: VALVOLINE CO
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 #: 800-274-5263
Company's Info Ph #: 606-264-7000
Safety Data Action Code: A
Record No. For Safety Entry: 001
Tot Safety Entries This Stk#: 001
Status: SMJ
Date MSDS Prepared: 10FEB95
Safety Data Review Date: 24FEB98
MSDS Serial Number: CGQFS

Ingredients/Identity Information

Proprietary: NO
Ingredient: ETHANE, 1,1,1,2-TETRAFLUORO; (1,1,1,2-TETRAFLUOROETHANE)
Ingredient Sequence Number: 01
Percent: 100
Ingredient Action Code: A
NIOSH (RTECS) Number: KI8842500
CAS Number: 811-97-2
OSHA PEL: N/K (FP N)
ACGIH TLV: N/K (FP N)

Proprietary: NO
Ingredient: FIRST AID PROC: IF SYMPTOMS DEVELOP, IMMEDIATELY MOVE INDIVIDUAL AWAY FROM EXPOSURE & INTO FRESH AIR. SEEK IMMEDIATE MEDICAL ATTENTION (ING 3)
Ingredient Sequence Number: 02
Ingredient Action Code: A
NIOSH (RTECS) Number: 9999999ZZ
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

Proprietary: NO
Ingredient: ING 2: ATTENTION; KEEP PERSON WARM & QUIET. IF PERSON IS NOT BREATHING, BEGIN ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, (ING 4)
Ingredient Sequence Number: 03
Ingredient Action Code: A
NIOSH (RTECS) Number: 9999999ZZ
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

Proprietary: NO
Ingredient: ING 3: ADMINISTER OXYGEN. NOTE TO MEDICAL PERSONNEL: INHALATION OF HIGH CONCENTRATIONS OF THIS MATERIAL, AS COULD OCCUR IN (ING 5)
Ingredient Sequence Number: 04
Ingredient Action Code: A
NIOSH (RTECS) Number: 9999999ZZ
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

Proprietary: NO
Ingredient: ING 4: ENCLOSED SPACES OR DURING DELIBERATE ABUSE, MAY BE ASSOCIATED W/CARDIAC ARRHYTHMIAS. SYMPATHOMIMETIC (ING 6)
Ingredient Sequence Number: 05
Ingredient Action Code: A
NIOSH (RTECS) Number: 9999999ZZ
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

Proprietary: NO
Ingredient: ING 5: DRUGS MAY INITIATE CARDIAC ARRHYTHMIAS IN PERSONS EXPOSED TO THIS MATERIAL.
Ingredient Sequence Number: 06
Ingredient Action Code: A
NIOSH (RTECS) Number: 9999999ZZ
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

Proprietary: NO
Ingredient: RESP PROT: (NEGATIVE PRESSURE TYPE) UNDER SPECIFIED CONDITIONS (CONSULT INDUSTRIAL HYGIENIST). ENGINEERING OR (ING 8)
Ingredient Sequence Number: 07
Ingredient Action Code: A
NIOSH (RTECS) Number: 9999999ZZ
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

Proprietary: NO
Ingredient: ING 7: ADMINISTRATIVE CONTROLS SHOULD BE IMPLEMENTED TO REDUCE EXPOSURE.
Ingredient Sequence Number: 08
Ingredient Action Code: A
NIOSH (RTECS) Number: 9999999ZZ
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

Proprietary: NO
Ingredient: EYE PROT: & FULL LENGTH FACESHIELD (FP N).
Ingredient Sequence Number: 09
Ingredient Action Code: A
NIOSH (RTECS) Number: 9999999ZZ
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

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Physical/Chemical Characteristics

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Appearance And Odor: CLEAR LIQUID.
Boiling Point: -16F, -27C
Vapor Pressure (MM Hg/70 F): 4964 @ 77F
Vapor Density (Air=1): 3.180
Specific Gravity: 1.210
Evaporation Rate And Ref: FASTER THAN ETHYL ETHER
Percent Volatiles By Volume: 100
pH: N/A
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Fire and Explosion Hazard Data

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Extinguishing Media: WATER FOG.
Special Fire Fighting Proc: USE NIOSH APPRVD SCBA & FULL PROT EQUIP (FP N). WATER MAY BE USED TO KEEP FIRE-EXPOSED CNTNRS COOL UNTIL FIRE IS OUT. REFER TO THE PERSONAL PROT EQUIP OF MSDS.
Unusual Fire And Expl Hazrds: HFC-134A IS NOT FLAMMABLE AT AMBIENT TEMPS & ATMOSPHERIC PRESSURE. HOWEVER, HFC-134A HAS BEEN SHOWN IN TESTS TO BE

COMBUSTIBLE AT PRESS AS LOW AS 5.5 (SUPDAT)

Reactivity Data

Stability: YES

Cond To Avoid (Stability): NONE SPECIFIED BY MANUFACTURER.

Materials To Avoid: AVOID CONTACT WITH ALKALI METALS, POWDERED METALS.

Hazardous Decomp Products: MAY FORM CARBONYL FLUORIDE, HYDROGEN FLUORIDE.

Hazardous Poly Occur: NO

Conditions To Avoid (Poly): NOT RELEVANT

Health Hazard Data

LD50-LC50 Mixture: NONE SPECIFIED BY MANUFACTURER.

Route Of Entry - Inhalation: YES

Route Of Entry - Skin: YES

Route Of Entry - Ingestion: NO

Health Haz Acute And Chronic: EYES: EXPOSURE CAUSES EYE IRRIT. SYMPS MAY INCLUDE STINGING, TEARING, REDNESS & SWELLING. SKIN: EXPOSURE MAY CAUSE BURNS & FROSTBITE. INGEST: SINGLE DOSE ORAL TOXICITY IS LOW. SWALLOWING SMALL AMTS DURING NORMAL HANDLING IS NOT LIKELY TO CAUSE HARMFUL EFFECTS; SWALLOWING LARGE AMOUNTS MAY BE HARMFUL. (EFTS OF OVEREXP)

Carcinogenicity - NTP: NO

Carcinogenicity - IARC: NO

Carcinogenicity - OSHA: NO

Explanation Carcinogenicity: NOT RELEVANT

Signs/Symptoms Of Overexp: HLTH HAZ: GI IRRITATION (NAUSEA, VOMITING, DIARRHEA). INHAL: EXPOSURE TO VAP/MIST IS POSSIBLE. SHORT-TERM INHAL TOXICITY IS LOW. BREATHING SMALL AMTS DURING NORMAL HANDLING IS NOT LIKELY TO CAUSE HARMFUL EFFECTS; BREATHING LARGE AMTS MAY BE HARMFUL. IRRITATION (NOSE, THROAT, RESPIRATORY TRACT). CNS DEPRESSION (SUPDAT)

Med Cond Aggravated By Exp: PRE-EXISTING LUNG DISORDERS, EG ASTHMA-LIKE CONDITIONS, MAY BE AGGRAVATED BY EXPOSURE TO THIS MATERIAL.

Emergency/First Aid Proc: EYES: IF MATERIAL GETS INTO EYES, IMMED FLUSH EYES GENTLY W/WATER FOR AT LEAST 15 MIN WHILE HOLDING EYELIDS APART. IF SYMPTOMS DEVELOP AS RESULT OF VAPOR EXPOSURE, IMMED MOVE INDIVIDUAL AWAY FROM EXPOSURE & INTO FRESH AIR BEFORE FLUSHING AS RECOMMENDED ABOVE. SEEK IMMED MED ATTN. SKIN: TREAT BURNED OR FROSTBITTEN SKIN BY FLUSHING EXPOSED AREA W/LUKEWARM WATER. SEEK IMMED MED ATTN. INGEST: (ING 2)

Precautions for Safe Handling and Use

Steps If Matl Released/Spill: SMALL SPILL: ALLOW TO EVAPORATE. VENTILATE AREA. LARGE SPILL: ALLOW TO EVAPORATE. PERSONS NOT WEARING PROTECTIVE EQUIPMENT SHOULD BE EXCLUDED FROM AREA UNTIL LEAK HAS BEEN REPORTED.

Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.

Waste Disposal Method: DISPOSAL MUST BE IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS (FP N). RETURN TO SUPPLIER FOR RECLAMATION.

Precautions-Handling/Storing: STORAGE: NOT APPLICABLE.

Other Precautions: CONTAINERS OF THIS MATERIAL MAY BE HAZARDOUS WHEN EMPTIED. SINCE EMPTIED CONTAINERS RETAIN PRODUCT RESIDUES (VAPOR, LIQUID AND/OR SOLID), ALL HAZARD PRECAUTIONS GIVEN IN THE DATA SHEET MUST BE OBSERVED.

Control Measures

Respiratory Protection: IF WORKPLACE EXPOSURE LIMIT(SP) OF PRODUCT OR ANY COMPONENT IS EXCEEDED, A NIOSH APPROVED AIR SUPPLIED RESPIRATOR IS ADVISED IN ABSENCE OF PROPER ENVIRONMENTAL CONTROL. OSHA REGS ALSO PERMIT OTHER NIOSH APPROVED RESPIRATORS (ING 7)

Ventilation: PROVIDE SUFFICIENT MECHANICAL (GENERAL AND/OR LOCAL EXHAUST) VENTILATION TO MAINTAIN EXPOSURE BELOW TLV(S).

Protective Gloves: RESISTANT SUCH AS POLYVINYL ALCOHOL.

Eye Protection: ANSI APPRVD CHEM WORKERS GOGGS (ING 9)

Other Protective Equipment: ANSI APPROVED EYE WASH & DELUGE SHOWER (FP N).
WEAR NORMAL WORK CLOTHING COVERING ARMS & LEGS.
Work Hygienic Practices: NONE SPECIFIED BY MANUFACTURER.
Suppl. Safety & Health Data: EXPLO HAZ: PSIG (AT 177C;350.6F) WHEN MIXED
W/AIR AT CONCENTRATIONS OF GENERALLY MORE THAN 60 VOLUME % AIR. AT LOWER
(DIZZINESS, DROWSINESS, WEAKNESS, FATIGUE, NAUSEA, HEADACHE,
UNCONSCIOUSNESS) & DEATH.

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Transportation Data
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Disposal Data
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Label Data
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Label Required: YES
Technical Review Date: 24FEB98
Label Date: 18FEB98
Label Status: M
Common Name: PYROIL SUVA TRANS A/C 15 LB CYLINDER
Chronic Hazard: NO
Signal Word: DANGER!
Acute Health Hazard-Moderate: X
Contact Hazard-Severe: X
Fire Hazard-Slight: X
Reactivity Hazard-None: X
Special Hazard Precautions: COMBUSTIBLE. ACUTE: EYES: EXPOSURE CAUSES EYE
IRRITATION WITH STINGING, TEARING, REDNESS AND SWELLING. SKIN: EXPOSURE MAY
CAUSE BURNS AND FROSTBITE. INGESTION: SWALLOWING LARGE AMOUNTS MAY BE
HARMFUL. GASTROINTESTINAL IRRITATION; NAUSEA, VOMITING, DIARRHEA.
INHALATION: BREATHING LARGE AMOUNTS MAY BE HARMFUL. IRRITATION; NOSE,
THROAT, RESPIRATORY TRACT. CENTRAL NERVOUS SYSTEM DEPRESSION; DIZZINESS,
DROWSINESS, WEAKNESS, FATIGUE, NAUSEA, HEADACHE, UNCONSCIOUSNESS AND DEATH.
CHRONIC: NONE LISTED BY MANUFACTURER.
Protect Eye: Y
Protect Skin: Y
Protect Respiratory: Y
Label Name: VALVOLINE CO
Label P.O. Box: 14000
Label City: LEXINGTON
Label State: KY
Label Zip Code: 40512
Label Country: US
Label Emergency Number: 800-274-5263