VALVOLINE CO -- MACS NON-CHLORINATED BRAKE CLEANER 4800 -- 6850-00N073627 ______ MSDS Safety Information ______ FSC: 6850 MSDS Date: 02/03/1995 MSDS Num: CCNZF LIIN: 00N073627 Tech Review: 12/27/2001 Product ID: MACS NON-CHLORINATED BRAKE CLEANER 4800 Responsible Party Cage: I0754 Name: VALVOLINE CO Box: 14000 City: LEXINGTON KY 40512 US Info Phone Number: 606-357-7847 Emergency Phone Number: 800-274-5263 Review Ind: N ______ Contractor Summary ______ Cage: I0754 Name: THE VALVOLINE CO Box: 14000 City: LEXINGTON KY 40512 US Phone: 606-357-7847 Cage: 72527 Name: VALVOLINE OIL CO Address: 3499 BLAZER PKY Box: 14000 City: LEXINGTON KY 40512 US Phone: 606-357-7206 / 800-274-5263 ______ Ingredients ______ Cas: 108-88-3 RTECS #: XS5250000 Name: TOLUENE (SARA 313) (CERCLA) % by Wt: 40 OSHA PEL: 200 PPM ACGIH TLV: 50 PPM, S EPA Rpt Qty: 1000 LBS DOT Rpt Qty: 1000 LBS Ozone Depleting Chemical: N _____ Cas: 67-56-1 RTECS #: PC1400000 Name: METHANOL; (METHYL ALCOHOL) (SARA 313) (CERCLA) % by Wt: 29 OSHA PEL: 200 PPM, S ACGIH TLV: 200 PPM; 250 STEL, S

Cas: 64742-89-8

EPA Rpt Qty: 5000 LBS DOT Rpt Qty: 5000 LBS

Ozone Depleting Chemical: N

Name: VM & P NAPHTHA; (ALIPHATIC PETROLEUM DISTILLATES) % by Wt: 22-32 OSHA PEL: N/K (FP N) ACGIH TLV: N/K (FP N) Ozone Depleting Chemical: N _____ Cas: 124-38-9 RTECS #: FF6400000 Name: CARBON DIOXIDE % by Wt: 0.0-9.0 OSHA PEL: 5000 PPM ACGIH TLV: 5000 PPM; 30000 STEL Ozone Depleting Chemical: N ______ Health Hazards Data LD50 LC50 Mixture: NONE SPECIFIED BY MANUFACTURER. Route Of Entry Inds - Inhalation: YES Skin: YES Ingestion: NO Carcinogenicity Inds - NTP: NO IARC: NO OSHA: NO Effects of Exposure: EYE: EXPOS CAUSES IRRIT. SYMPS MAY INCL STINGING, TEARING, REDNESS & SWELL. SKIN: EXPOS MAY CAUSE MILD IRRIT. PRLNGD/RPTD EXPOS MAY DRY SKIN. SYMPS MAY INCL REDNESS, BURNING, DRYING & CRACKING & SKIN BU RNS. INGEST:SINGLE DOSE ORAL TOX IS LOW. SWALLOWING SM AMTS DURING NORM HNDLG IS NOT LIKELY TO CAUSE HARMFUL EFTS; SWALLOWING LG AMTS MAY BE HARMFUL. MATL CAN ENTER LUNGS DURING SWALLOW/VOMIT & CAUSE LUNG INFLAM &/OR DMG. INHAL: EXPOS TO VAP/MIST IS POSS. SYMPS OF EXPOS: GI IRRIT (NAUS, VOMIT, DIARR), IRRIT (NOSE, THROAT, RESP TRACT), CNS DEPRESS (DIZZ, DROW, WEAK, FATG, NAUS, HDCH, UNCON) & DEATH. (EFTS OF OVEREXP) Explanation Of Carcinogenicity: NOT RELEVANT Signs And Symptions Of Overexposure: HLTH HAZ: CHRONIC: TOLUENE APPEARS THE NAVY LIST OF OCCUP CHEM REPRO HAZS. SEEK CONSULTATION FROM APPROP HLTH PROFESSIONALS CONCERNING LATEST HAZ LIST INFO & SAFE HNDLG &

INFO (FP N). OVEREXP TO MATL (OR COMPONENTS) HAS BEEN SUGGESTED AS CAUSE OF FOLLOWING EFTS IN LAB ANIMALS & MAY AGGRAVATE PRE-EXISTING DISORDERS OF THESE ORGANS IN HUMANS: CARD SENSIT, LIVER ABNORMS,

ANEMIA & SPLEEN, NER VS SYS, EYE, KIDNEY, LUNG & BRAIN DMG. OVEREXP TO MATL (ITS COMPONENTS) HAS BEEN SUGGESTED AS CAUSE OF EFTS IN HUMANS & MAY AGGRAVATE PRE-EXISTING DISORDERS OF THESE ORGANS:LIVER ABNORMS, CARD

Medical Cond Aggravated By Exposure: PRE-EXISTING SKIN DISORDERS AND PRE-EXISTING LUNG DISORDERS, EG ASTHMA-LIKE CONDITIONS, MAY BE AGGRAVATED BY EXPOSURE TO THIS MATERIAL.

First Aid: EYES: IMMED MOVE AWAY FROM EXPOS & INTO FRESH AIR. FLUSH GENTLY

SENSIT, EYE DMG. TOLUENE MAY BE HARMFUL (SUPDAT)

W/WATER FOR AT LEAST 15 MIN WHILE HOLDING LIDS APART; SEEK IMMED MED ATTN. SKIN: REMOVE CONTAMD CLTHG. WASH EXPOSED AREA W/SOAP & WATER. I

F

SYMPS PERSIST, SEEK MED ATTN. LAUNDERCLTHG BEFORE REUSE. INGEST:CALL MD/POIS CTL CTR IMMED FOR INSTRUCTIONS. MATL CNTNS BOTH METHALON & PETRO

DISTILS. ASPIR OF MATL INTO LUNGS DUE TO VOMIT CAN CAUSE CHEM PNEUM WHICH CAN BE FATAL. INHAL:IF SYMPS DEVELOP IMMED MOVE AWAY FROM EXPOS

INTO FRESH AIR. SEEK IMMED MED ATTN; KEEP WARM & QUIET. IF NOT BRTHG, BEGIN ARTF RESP. IF BRTHG IS DFCLT, ADMIN OXYG EN. NOTE TO MD: PROD CNTNS (SUPDAT)

Handling and Disposal

Spill Release Procedures: SM SPILL:ABSORB LIQ ON VERMICULITE, FLOOR ABSORB/OTHER ABSORB MATL. LG SPILL:ELIM ALL IGNIT SOURCES (FLARES, FLAMES INCL PILOT LIGHTS, ELEC SPKS). PERS NOT WEARING PROT EQUIP SHOULD

BE EXCLUDED FROM A REA OF SPILL UNTIL CLEAN-UP HAS BEEN COMPLETED.

SPILL @ SOURCE. PVNT FROM ENTERING DRAINS/SEWERS/STREAMS/OTHER BODIES OF

WATER. PVNT SPREADING. IF RUNOFF OCCURS NOTIFY AUTHS AS REQD. (OTHER INFO)

Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.

Waste Disposal Methods: DISPOSE OF IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

Handling And Storage Precautions: CNTNRS OF MATL MAY BE HAZ WHEN EMPTIED.

SINCE EMPTIED CNTNRS RETAIN PROD RESIDUES (VAP, LIQ &/OR SOLID), ALL HAZ

PRECS GIVEN IN MSDS MUST BE OBSERVED.

Other Precautions: ALL FIVE GALLON PAILS AND LARGER METAL CONTAINERS INCLUDING TANK CARS AND TANK TRUCKS SHOULD BE GROUNDED AND/OR BONDED WHEN MATERIAL IS TRANSFERRED.

Fire and Explosion Hazard Information

Flash Point Method: TCC

Flash Point Text: 38.0F,3.3C

Lower Limits: 1.2%

Extinguishing Media: REGULAR FOAM, CARBON DIOXIDE AND CARBON MONOXIDE, VARIOUS HYDROCARBONS.

Fire Fighting Procedures: USE NIOSH APPROVED SCBA AND FULL PROTECTIVE EQUIPMENT (FP N). REFER TO PERSONAL PROTECTIVE EQUIPMENT SECTION OF MSDS.

Unusual Fire/Explosion Hazard: MATL IS HIGHLY VOLAT & READILY GIVES OFF VAPS WHICH MAY TRAVEL ALONG GROUND/BE MOVED BY VENT & IGNITED BY PILOT

LIGHTS, OTHER FLAMES, SPKS, HEATERS, SMKNG, ELEC MOTORS, STATIC DISCHARGE/OTHER IGNIT SO URCES AT LOCATIONS DIST FROM MATL HNDLG POINT.

NEVER USE WELDING/CUTTING TORCH ON/NEAR DRUM (EVEN EMPTY) BECAUSE(SUPDAT)

Control Measures

Respiratory Protection: IF WORKPLACE EXPOS LIM(S) OF PROD/ANY COMPONENT IS

EXCEEDED, NIOSH APPRVD AIR SUPPLIED RESP IS ADVISED IN ABSENCE OF PROPER

ENVIRON CTL. OSHA REGS ALSO PERMIT OTHER NIOSH RESPS (NEG PRESS TYPE) UNDER SPECIFIED CNDTNS (CONSULT INDUSTRIAL HYGIENIST). ENGINEERING/ADMINISTRATIVE CONTROLS SHOULD BE IMPLEMENTED TO REDUCE EXPOSURE.

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

Protective Gloves: RESIST GLOVES SUCH AS NEOPRENE.

Eye Protection: ANSI APPRVD CHEM WORKERS GOGGLES (FP N).

Other Protective Equipment: ANSI APPROVED EYE WASH & DELUGE SHOWER (FP N).

Work Hygienic Practices: NONE SPECIFIED BY MANUFACTURER.

Supplemental Safety and Health: EXPLO HAZS: PROD (EVEN JUST RESIDUE) CAN

IGNITE EXPLO. EFTS OF OVEREXP: TO HUMAN FETUS BASED ON TESTS W/LAB ANIMALS. CASE STUDIES REVEAL PRLNGD INTENTIONAL ABUSE OF TOLUENE DURING

PREGNANCY MAY CAUSE BIRTH DEFECTS IN HUMANS. FIRST AID: METHANOL WHICH

CAN CAUSE INTOXICATION & CNS DEPRESS. METHANOL IS (OTHER INFO)

Physical/Chemical Properties

B.P. Text: 147F,64C Vapor Pres: 97.68 @68F Vapor Density: >1 Spec Gravity: 0.820 VOC Grams/Liter: 813

Evaporation Rate & Reference: FASTER THAN ETHYL ETHER

Appearance and Odor: LIQUID. Percent Volatiles by Volume: >99

Reactivity Data

Stability Indicator: YES

Stability Condition To Avoid: AVOID HEAT, OPEN FLAME AND PROLONGED STORAGE

AT ELEVATED TEMPERATURES.

Materials To Avoid: AVOID CONTACT WITH STRONG OXIDIZING AGENTS.

Hazardous Decomposition Products: MAY FORM CARBON DIOXIDE AND CARBON MONOXIDE, VARIOUS HYDROCARBONS.

Hazardous Polymerization Indicator: NO

Conditions To Avoid Polymerization: NOT RELEVANT

Toxicological Information

Toxicological Information: OTHER INFO: SOIL & OTHER MATLS TO CNTNRS FOR DISP. PVNT RUN-OFF TO SEWERS/STREAMS/OTHER BODIES OF WATER. IF RUN-OFF

OCCURS NOTIFY AUTHS AS REQD THAT SPILL HAS OCCURED.

Ecological Information

MSDS Transport Information

Regulatory Information

Other Information

Other Information: VOLATILE ORGANIC COMPOUND: 813 G/L; 6.790 LBS/GAL SUPDAT: METABOLIZED TO FORMIC ACID & FORMALDEHYDE. METABOLITES CAN CAUSE

METABOLIC ACIDOSIS, VISUAL DISTURBS & BLINDNESS. SINCE METABOLISM IS REQD FO R TOX SYMPS, THEIR ONSET MAY BE DELAYED FROM 6-30 HRS FOLLOWING

INGEST. ETHANOL COMPETES FOR SAME METABOLIC PATHWAY & HAS BEEN USED TO

PVNT METHANOL METABOLISM. ETHANOL ADMIN IS INDICATED IN SYMPTOMAT IC PATIENTS/AT BLOOD METHANOL CONCS ABOVE 20 UG/DL. METHANOL IS EFTIVELY REMOVED BY HEMODIALYSIS. SPILL PROC: PUMP/VACUUM TRANSFER SPILLED PROD

TO CLEAN CNTNRS FOR RECOVERY. ABSORB UNRECOVERABLE PROD. TRANSFER CONTAMD ABSORB, (TOX INFO)

HAZCOM Label

Product ID: MACS NON-CHLORINATED BRAKE CLEANER 4800

Cage: I0754

Company Name: THE VALVOLINE CO

PO Box: 14000 City: LEXINGTON KY Zipcode: 40512 US

Health Emergency Phone: 800-274-5263 Date Of Label Review: 10/08/1996

Label Date: 10/08/1996 Chronic Hazard IND: Y Eye Protection IND: YES Skin Protection IND: YES

Signal Word: DANGER

Respiratory Protection IND: YES

Health Hazard: Moderate Contact Hazard: Moderate

Fire Hazard: Severe Reactivity Hazard: None

Hazard And Precautions: EXTREMELY FLAMMABLE. ACUTE: EYE: EXPOSURE CAUSES

IRRITATION. SYMPTOMS MAY INCLUDE STINGING, TEARING, REDNESS AND SWELLING. SKIN: EXPOSURE MAY CAUSE MILD IRRITATION. PROLONGED OR REPEATED EXPOSURE MAY DRY SKIN. SYMPTOMS MAY INCLUDE REDNESS, BURNING,

DRYING AND CRACKING AND SKIN BURNS. INGESTION: SWALLOWING LARGE AMOUNTS

MAY BE HARMFUL. INHALATION: GI IRRITATION, IRRITATION OF NOSE, THROAT AND RESPIR ATORY TRACT, CNS DEPRESSION. CHRONIC: TOLUENE APPEARS ON THE

NAVY OCCUPATIONALCHEMICAL REPRODUCTIVE HAZARDS LIST (FP N). MAY CAUSE LIVER ABNORMALITIES, HEART SENSITIZATION AND EYE DAMAGE.

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