Ingred Name: ZINC COMPOUND

VALVOLINE OIL CO SUBSIDIARY OF ASHLAND OIL INC. -- NAPA MV MOTOR OIL SAE 10W40 -- 9150-00-116-0506

Product Identification =========== Product ID: NAPA MV MOTOR OIL SAE 10W40 MSDS Date: 05/20/1993 FSC:9150 NIIN:00-116-0506 MSDS Number: CCMNR === Responsible Party === Company Name: VALVOLINE OIL CO SUBSIDIARY OF ASHLAND OIL INC. Address: 200 E MAIN ST Box:14000 City:LEXINGTON State: KY ZIP:40512 Country: US Info Phone Num: 606-264-7000/7616; FAX 601-429-0537 Emergency Phone Num: 800-ASHLAND/800-274-5263 CAGE: 72527 === Contractor Identification === Company Name: BALKAMP INC Address:2601 S HOLT ROAD Box: City: INDIANAPOLIS State: IN ZIP:46241 Country: US Phone: 317-244-7241 CAGE: 70842 Company Name: NAPA, A DIVISION OF LINCOLN AUTOMOTIVE Address: ONE LINCOLN WAY Box:City:ST. LOUIS State:MO ZIP:63120-1578 Country: US Phone: 414-255-5520 CAGE: 05003 Company Name: VALVOLINE OIL CO Address:3499 BLAZER PKY Box:14000 City:LEXINGTON State:KY ZIP:40512 Country: US Phone: 606-357-7206 / 800-274-5263 CAGE: 72527 Composition/Information on Ingredients ======== Ingred Name: DETERGENT & DISPERSANT ENGINE OIL PACKAGE, CONTAINS INGRED #2. Fraction by Wt: 10-15% Other REC Limits: NONE RECOMMENDED

Page 1 of 4

Fraction by Wt: 10%

Other REC Limits: NONE RECOMMENDED

Ingred Name: LUBE OIL ADDITIVE

Fraction by Wt: 10-15%

Other REC Limits: NONE RECOMMENDED

Ingred Name: PETROLEUM LUBE OIL

CAS:64742-65-0 RTECS #:PY8038500

Fraction by Wt: 70-85%

Other REC Limits: NONE RECOMMENDED

========= Hazards Identification =============

LD50 LC50 Mixture:NOT ESTABLISHED FOR PRODUCT.

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:PRODUCT NOT HAZ AS DEFINED BY

OSHA(29CFR1910.1200)BASED ON TESTING OF SIMILAR PRODUCTS &/OR

COMPONENTS.EYE:NOT EXPECTED TO CAUSE IRRIT DURING NORMAL CONDITIONS

OF USE.SKIN:PROL/REP CONTACT MAY BE MILD LY IRRIT, MAY CAUSE

DERM.INGEST:NOT EXPECTED TO BE TOXIC.PROD HAS LAXATIVE

PROPERTIES, MAY CAUSE NAU, ABD CRAMPS, (SUPPLEM)

Explanation of Carcinogenicity: SEE OTHER PRECAUTION SEC OF MSDS. Effects of Overexposure: MILDLY SKIN IRRIT, DERMATITIS. LAXATIVE PROPERTIES, NAUSEA, ABDOMINAL CRAMPS, DIARRHEA, RESP IRRIT, DISCOMFORT.

Medical Cond Aggravated by Exposure: NONE SPECIFIED BY MANUFACTURER.

=========== First Aid Measures ================

First Aid:SKIN:THOROUGHLY WASH W/SOAP/WATER.REMOVE CONTAMIN
CLOTH.EYE:FLUSH W/LG AMTS OF WATER LIFTING LIDS.IRRIT PERSISTS GET
MED ATTN.INGEST:DO NOT INDUCE VOMIT.KEEP WARM/QUIET.GET MED
ATTN.INHAL:REMOVE TO FR ESH AIR.BREATH DIFFI ADMIN OXYGEN.STOP
BREATH GIVE ART RESP.KEEP WARM/QUIET.GET MED ATTN.

========= Fire Fighting Measures ==============

Flash Point:>400F,>204C

Autoignition Temp: Autoignition Temp Text: NP

Lower Limits:UNAVAI

Upper Limits: UNAVAI

Extinguishing Media: REGULAR FOAM OR CARBON DIOXIDE OR DRY CHEMICAL.

Fire Fighting Procedures: WEAR SELF-CONTAINED BREATHING APPARATUS W/FULL FACEPIECE OPERATED IN POSITIVE PRESSURE DEMAND MODE. WATER/FOAM MAY CAUSE FROTHING-VIOLENT/POSSIBLY ENDANGER(SUPP)

Unusual Fire/Explosion Hazard: NEVER USE WELD/CUT TORCH ON/NEAR DRUM(EVEN EMPTY) BECAUSE PRODUCT(EVEN JUST RESIDUE) CAN IGN EXPLOSIVELY.

======= Accidental Release Measures =========

Spill Release Procedures:SM:ABSORB ON VERMI/FLOOR ABSORB/OTHER
ABSORB.LG:PREVENT RUNOFF TO SEWER/STREAM/BODIES OF WATER.IF SO
NOTIFY PROPER AUTHORITIE.EXCLUDE PERSON W/O PPE FRM AREA TIL

CLEANUP COMPLETE.STOP SPILL.DIKE-PREVE NT SPREAD.PUMP LIQ TO SALVAGE TK.REMAINLIQ(SUPPL)

Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.

========== Handling and Storage ============

Handling and Storage Precautions: CNTNR OF MATL MAY BE HAZ WHEN EMPTIED. SINCE EMPTIED CONTNRS RETAIN PROD RESIDUES(VAP/LIQ/SOLID) ALL HAZ PRECAUT GIVEN IN MSDS MUST BE OBSERVED.

Other Precautions: CAUTION: USED MOTOR OIL HAS BEEN SHOWN TO CAUSE SKIN CANCER IN CERTAIN LAB ANIMALS CONTINUALLY EXPO TO USED MOTOR OIL BY REPEATED APPLICATIONS. AVOID PROLONGED/REPEATED CONTACT TO SKIN.

====== Exposure Controls/Personal Protection ========

Respiratory Protection: NOT REQUIRED UNDER NORMAL CONDITIONS OF USE. HOWEVER IF OIL MISTS GENERATED ABOVE RECOMMENDED PEL/TLV OF 5MG/M3 NIOSH/MSHA APPROVED RESP ADVISED IN ABSENCE OF PROPER ENVIRO CONTROL. (SEE YOUR INDUSTRIAL HYGIENIST).

Ventilation: NOT REQUIRED UNDER NORM USE CONDITIONS. HOWEVER UNUSUAL OPERATING CONDITIONS EXIST PROVIDE SUFF MECH (GEN, LOC EXHAU) VENTI. Protective Gloves: NOT NORM REQUIRE; NITIRLE RUBB FOR CONTAC Eye Protection: NOT NORM REQUIRE; SAF GLASS, CHEM SPLA GOG Other Protective Equipment: NORMAL WORK CLOTHING COVERING ARMS/LEGS. Work Hygienic Practices: LAUNDER CONTAMIN CLOTH BEF REUSE. Supplemental Safety and Health

VAP PRESS:PETRO LUB OIL. FIREFIGHT:FIREFIGHTER LIFE ESPECIALLY IF SPRAY INTO CNTNR OF HOT BURNING LIQ.DENSE SMOKE MAY BE GENERATED WHILE BURNING. HEALTH HAZ:DIARR.INHAL:NOT EXPECTED TO BE HAZ @NORM RM TEMP.EXPO EXCEED OIL MIST PEL/TLV, MISTMAY RESULT IN RESP IRRIT, POSSIBLE DISCOMFT. SPILL:TAKEUP W/SAND/EARTH/ETC.

========= Physical/Chemical Properties =========

HCC:V6

Boiling Pt:B.P. Text:570F,299C
Melt/Freeze Pt:M.P/F.P Text:NP
Decomp Temp:Decomp Text:NP
Vapor Pres:<0.10MM
Vapor Density:>AIR
Spec Gravity:0.877 @60F
pH:NP
Viscosity:NP

Evaporation Rate & Reference: SLOWER THAN ETHER.

Solubility in Water:NP

Appearance and Odor:LIGHT AMBER LIQUID, HOMO SOLN.

Percent Volatiles by Volume:NA

Corrosion Rate:NP

======= Stability and Reactivity Data ==========

Stability Indicator/Materials to Avoid:YES
AVOID CONTACT W/STRONG OXIDIZING AGENTS.
Stability Condition to Avoid:NONE SPECIFIED BY MANUFACTURER.
Hazardous Decomposition Products:MAY FORM TOXIC MATLS:CARBON
DIOXIDE, CARBON MONOXIDE, VARIOUS HYDROCARBONS, OXIDES OF

SULFUR, NITROGEN & PHOSPHORUS, ETC.

======= Disposal Considerations ===========

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

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