MATERIAL SAFETY DATA SHEET

VALVOLINE

DIVISION OF ASHLAND OIL, INC.
P.O. BOX 391
ASHLAND, KENTUCKY 41114
(606) 329-3333

24-HOUR EMERGENCY TELEPHONE (606) 324-1133

000051 MAC'S CARBURETOR CLEANER PAGE: 1

THIS MSDS COMPLIES WITH 29 CFR §1910.1200 (THE HAZARD COMMUNICATION STANDARD)

PRODUCT NAME: MAC'S CARBURETOR CLEANER

ORDERED AS: NAPA CARB CLEANER

STATE UNIV. COLLEGE AT BUFFALO
ENVIRONMENTAL HEALTH & SAFETY
CLINTON CENTER
1300 ELMWOOD AVENUE
BUFFALO, NY 14222
ATTN: DAVID N. MILLER

SS/SS 040 415431-900
DATA SHEET NO: 0172402-002
LATEST REVISION DATE: 05/07-87143
PRODUCT:
INVOICE: REQST
INVOICE DATE: 04/04/88
TO:

SECTION I-PRODUCT IDENTIFICATION

GENERAL OR GENERIC ID: SOLVENT BLEND

DOT HAZARD CLASSIFICATION: CORROSIVE (173.240) AND COMBUSTIBLE (173.115)

SECTION II-COMPONENTS

IF PRESENT, IARC, NTP AND OSHA CARCINOGENS ARE IDENTIFIED IN THIS SECTION
SEE DEFINITION PAGE FOR CLARIFICATION

INGREDIENT		% (BY WT)	NOTE
METHYLENE CHLORIDE CAS #: 75-09-2	PEL: 500 PPM	40-55 TLV: 100 PPM	(1)
AROMATIC PETROLEUM DISTILLATES CAS #: 64741-98-6	PEL: 100 PPM	10-25	(2)
ORTHO CRESOL CAS #: 95-48-7	PEL: 5 PPM - SKIN	1-5 TLV: 5 PPM - SKIN	
PHENOL CAS #: 108-95-2	PEL: 5 PPM - SKIN	1-5 TLV: 5 PPM - SKIN	(3)

(1): THE OSHA ACCEPTABLE CEILING CONCENTRATION IS 1000 PPM. THE ACCEPTABLE MAXIMUM PEAK ABOVE THE ACCEPTANCE CEILING CONCENTRATION FOR AN 8-HOUR SHIFT IS 2000 PPM FOR A MAXIMUM DURATION OF 5 MINUTES IN ANY 2 HOURS. NIOSH RECOMMENDS A LIMIT OF 75 PPM, 8-HOUR TWA; 500 PPM 15 MINUTE CEILING.

(2): TLV NOT ESTABLISHED FOR THIS MATERIAL.

THIS COMPONENT MAY CONTAIN 16.2% PSEUDOCUMENE (1,2,4 OR 1,2,5-TRIMETHYLBENZENE), CAS# 95-63-6 AND 10.8% MESITYLENE(1,3,5-TRIMETHYLBENZENE), CAS# 108-67-8.

(3): SKIN ABSORPTION MAY POTENTIALLY CONTRIBUTE TO THE OVERALL EXPOSURE TO THIS MATERIAL. APPROPRIATE MEASURES SHOULD BE TAKEN TO PREVENT ABSORPTION SO THAT THE TLV IS NOT INVALIDATED.

* THE SPECIFIC CHEMICAL IDENTITY HAS BEEN WITHHELD AS A TRADE SECRET.

SECTION III-PHYSICAL DATA

PROPERTY	REFINEMENT	MEASUREMENT
BOILING POINT	FOR COMPONENT(40-55%)	102.00 DEG F (38.88 DEG C) @ 760.00 MMHG
VAPOR PRESSURE	FOR COMPONENT(1-5%)	< 1.00 MMHG @ 68.00 DEG F (20.00 DEG C)
SPECIFIC VAPOR DENSITY		HEAVIER THAN AIR
SPECIFIC GRAVITY		1.100 - 1.110 @ 70.00 DEG F (21.11 DEG C)
PERCENT VOLATILES		55-70%
EVAPORATION RATE		SLOWER THAN ETHER
PH		10.0 - 10.5
APPEARANCE		YELLOW-GREENISH BROWN
STATE		LIQUID
FORM		EMULSION

SECTION IV-FIRE AND EXPLOSION INFORMATION

FLASH POINT(TCC) 140.0 - 150.0 DEG F
(60.0 - 65.6 DEG C)

EXPLOSIVE LIMIT (LOWEST VALUE OF COMPONENT) LOWER - 1.0%

1300.650

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User: Garage

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SECTION IV-FIRE AND EXPLOSION INFORMATION (CONTINUED)

EXTINGUISHING MEDIA: ALCOHOL FOAM OR WATER FOG

HAZARDOUS DECOMPOSITION PRODUCTS: MAY FORM TOXIC MATERIALS:, CARBON DIOXIDE AND CARBON MONOXIDE, HYDROGEN CHLORIDE, PHOSGENE, VARIOUS HYDROCARBONS, ETC.

FIREFIGHTING PROCEDURES: WATER MAY BE USED TO KEEP FIRE-EXPOSED CONTAINERS COOL UNTIL FIRE IS OUT.

WEAR SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACEPIECE OPERATED IN THE POSITIVE PRESSURE DEMAND MODE WHEN FIGHTING FIRES.

SPECIAL FIRE & EXPLOSION HAZARDS: NEVER USE WELDING OR CUTTING TORCH ON OR NEAR DRUM (EVEN EMPTY) BECAUSE PRODUCT (EVEN JUST RESIDUE) CAN IGNITE EXPLOSIVELY.

NFPA CODES: HEALTH- 1 FLAMMABILITY- 0 REACTIVITY- 0

SECTION V-HEALTH HAZARD DATA

EFFECTS OF ACUTE OVEREXPOSURE: FOR COMPONENT

EYES - CAN CAUSE SEVERE IRRITATION, REDNESS, TEARING, BLURRED VISION.
BREATHING - EXCESSIVE INHALATION OF VAPORS CAN CAUSE NASAL AND RESPIRATORY IRRITATION, CENTRAL NERVOUS SYSTEM EFFECTS INCLUDING DIZZINESS, WEAKNESS, FATIGUE, NAUSEA, HEADACHE AND POSSIBLE UNCONSCIOUSNESS, AND EVEN DEATH.
SWALLOWING - CAN CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING, AND DIARRHEA. ASPIRATION OF MATERIAL INTO THE LUNGS CAN CAUSE CHEMICAL PNEUMONITIS WHICH CAN BE FATAL.
SKIN - CAN CAUSE IRRITATION. BURNS CAN RESULT FROM PROLONGED CONTACT.

FIRST AID:

IF ON SKIN: THOROUGHLY WASH EXPOSED AREA WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING. LAUNDER CONTAMINATED CLOTHING BEFORE RE-USE. REMOVE CONTAMINATED SHOES PROMPTLY. DISCARD SHOES SATURATED WITH THIS PRODUCT.

IF IN EYES: IMMEDIATELY FLUSH WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES, LIFTING UPPER AND LOWER LIDS OCCASIONALLY. GET IMMEDIATE MEDICAL ATTENTION.

IF SWALLOWED: DO NOT INDUCE VOMITING, KEEP PERSON WARM, QUIET, AND GET MEDICAL ATTENTION. ASPIRATION OF MATERIAL INTO THE LUNGS DUE TO VOMITING CAN CAUSE CHEMICAL PNEUMONITIS WHICH CAN BE FATAL.

IF BREATHED: IF AFFECTED, REMOVE INDIVIDUAL TO FRESH AIR. IF BREATHING IS DIFFICULT, ADMINISTER OXYGEN. IF BREATHING HAS STOPPED GIVE ARTIFICIAL RESPIRATION. KEEP PERSON WARM, QUIET AND GET MEDICAL ATTENTION.

EFFECTS OF CHRONIC OVEREXPOSURE: FOR COMPONENT

OVEREXPOSURE TO METHYLENE CHLORIDE CAN RAISE THE LEVEL OF CARBON MONOXIDE IN THE BLOOD CAUSING CARDIOVASCULAR STRESS. RESULTS OF LABORATORY ANIMAL TESTS SHOW THAT METHYLENE CHLORIDE PRODUCED: BENIGN TUMORS IN RATS EXPOSED TO 500 PPM; CANCER IN RATS AND MICE EXPOSED TO 1500 PPM AND HIGHER, BUT NOT IN HAMSTERS. LIMITED EPIDEMIOLOGY STUDIES FAILED TO SHOW A TUMORIGENIC RESPONSE IN PLANT WORKERS. CONSEQUENTLY, METHYLENE CHLORIDE IS NOT BELIEVED TO POSE A MEASURABLE CANCER RISK TO MAN WHEN HANDLED AS RECOMMENDED. LABORATORY ANIMAL STUDIES TO EVALUATE POTENTIAL BIRTH DEFECTS AND EFFECTS ON REPRODUCTION SHOW: A LOW DEGREE OF MATERNAL AND EMBRYOTOXICITY AT 4500 PPM, NO TERATOLOGICAL EFFECTS AND NO EFFECTS ON REPRODUCTION AT CONCENTRATIONS OF 4500 AND 1225 PPM.

OVEREXPOSURE TO THIS MATERIAL (OR ITS COMPONENTS) HAS BEEN SUGGESTED AS A CAUSE OF THE FOLLOWING EFFECTS IN HUMANS:, LIVER ABNORMALITIES, KIDNEY DAMAGE, EYE DAMAGE

SECTION VI-REACTIVITY DATA

HAZARDOUS POLYMERIZATION: CANNOT OCCUR-- AVOID CONTACT WITH STRONG MINERAL ACIDS AND STRONG ORGANIC ACIDS.

STABILITY: STABLE

INCOMPATIBILITY:

SECTION VII-SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

SMALL SPILL: ABSORB LIQUID ON PAPER, VERMICULITE, FLOOR ABSORBENT, OR OTHER ABSORBENT MATERIAL AND TRANSFER TO HOOD.

LARGE SPILL: PERSONS NOT WEARING PROTECTIVE EQUIPMENT SHOULD BE EXCLUDED FROM AREA OF SPILL UNTIL CLEAN-UP HAS BEEN COMPLETED. STOP SPILL AT SOURCE, DIKE AREA OF SPILL TO PREVENT SPREADING, PUMP LIQUID TO SALVAGE TANK. REMAINING LIQUID MAY BE TAKEN UP ON SAND, CLAY, EARTH, FLOOR ABSORBENT, OR OTHER ABSORBENT MATERIAL AND SHOVELED INTO CONTAINERS.

WASTE DISPOSAL METHOD:

SMALL SPILL: ALLOW VOLATILE PORTION TO EVAPORATE IN HOOD. ALLOW SUFFICIENT TIME FOR VAPORS TO COMPLETELY CLEAR HOOD DUCT WORK. DISPOSE OF REMAINING MATERIAL IN ACCORDANCE WITH APPLICABLE REGULATIONS.

LARGE SPILL: DEPOSIT IN A LANDFILL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.

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SECTION VIII-PROTECTIVE EQUIPMENT TO BE USED

RESPIRATORY PROTECTION: IF WORKPLACE EXPOSURE LIMIT(S) OF PRODUCT OR ANY COMPONENT IS EXCEEDED (SEE SECTION II), A NIOSH/MSHA APPROVED AIR SUPPLIED RESPIRATOR IS ADVISED IN ABSENCE OF PROPER ENVIRONMENTAL CONTROL. OSHA REGULATIONS ALSO PERMIT OTHER NIOSH/MSHA RESPIRATORS (NEGATIVE PRESSURE TYPE) UNDER SPECIFIED CONDITIONS (SEE YOUR SAFETY EQUIPMENT SUPPLIER). ENGINEERING OR ADMINISTRATIVE CONTROLS SHOULD BE IMPLEMENTED TO REDUCE EXPOSURE.

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

PROTECTIVE GLOVES: WEAR RESISTANT GLOVES SUCH AS:, NITRILE RUBBER, NEOPRENE

EYE PROTECTION: CHEMICAL SPLASH GOGGLES IN COMPLIANCE WITH OSHA REGULATIONS ARE ADVISED; HOWEVER, OSHA REGULATIONS ALSO PERMIT OTHER TYPE SAFETY GLASSES. (CONSULT YOUR SAFETY EQUIPMENT SUPPLIER)

OTHER PROTECTIVE EQUIPMENT: NORMAL WORK CLOTHING COVERING ARMS AND LEGS.

SECTION IX-SPECIAL PRECAUTIONS OR OTHER COMMENTS

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 THIS DATASHEET MUST BE OBSERVED.

THE INFORMATION ACCUMULATED HEREIN IS BELIEVED TO BE ACCURATE BUT IS NOT WARRANTED TO BE WHETHER ORIGINATING WITH THE COMPANY OR NOT. RECIPIENTS ARE ADVISED TO CONFIRM IN ADVANCE OF NEED THAT THE INFORMATION IS CURRENT, APPLICABLE, AND SUITABLE TO THEIR CIRCUMSTANCES.

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DEFINITIONS

THIS DEFINITION PAGE IS INTENDED FOR USE WITH MATERIAL SAFETY DATA SHEETS SUPPLIED BY THE ASHLAND PETROLEUM COMPANY. RECIPIENTS OF THESE DATA SHEETS SHOULD CONSULT THE OSHA SAFETY AND HEALTH STANDARDS (29 CFR 1910), PARTICULARLY SUBPART G - OCCUPATIONAL HEALTH AND ENVIRONMENTAL CONTROL, AND SUBPART I - PERSONAL PROTECTIVE EQUIPMENT, FOR GENERAL GUIDANCE ON CONTROL OF POTENTIAL OCCUPATIONAL HEALTH AND SAFETY HAZARDS.

SECTION I
PRODUCT IDENTIFICATION

GENERAL OR GENERIC ID: CHEMICAL FAMILY OR PRODUCT DESCRIPTION.

DOT HAZARD CLASSIFICATION: PRODUCT MEETS DOT CRITERIA FOR HAZARDS LISTED.

SECTION II
COMPONENTS

COMPONENTS ARE LISTED IN THIS SECTION IF THEY PRESENT A PHYSICAL OR HEALTH HAZARD AND ARE PRESENT AT OR ABOVE 1% IN THE MIXTURE. IF A COMPONENT IS IDENTIFIED AS A CARCINOGEN BY NTP, IARC OR OSHA AS OF THE DATE ON THE MSDS, IT WILL BE LISTED AND FOOTNOTED IN THIS SECTION WHEN PRESENT AT OR ABOVE 0.1% IN THE PRODUCT. NEGATIVE CONCLUSIONS CONCERNING CARCINOGENICITY ARE NOT REPORTED. ADDITIONAL INFORMATION MAY BE FOUND IN SECTION V. OTHER COMPONENTS MAY BE LISTED IF DEEMED APPROPRIATE.

IDENTITIES OF COMPONENTS LISTED GENERICALLY ARE DECLARED TRADE SECRET.

EXPOSURE RECOMMENDATIONS ARE FOR COMPONENTS. OSHA PERMISSIBLE EXPOSURE LIMITS (PELS) AND AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS (ACGIH) THRESHOLD LIMIT VALUES (TLVS) APPEAR ON THE LINE WITH THE COMPONENT IDENTIFICATION. OTHER RECOMMENDATIONS APPEAR AS FOOTNOTES.

SECTION III
PHYSICAL DATA

BOILING POINT: OF PRODUCT IF KNOWN. THE LOWEST VALUE OF THE COMPONENTS IS LISTED FOR MIXTURES.

VAPOR PRESSURE: OF PRODUCT IF KNOWN. THE HIGHEST VALUE OF THE COMPONENTS IS LISTED FOR MIXTURES.

SPECIFIC VAPOR DENSITY: COMPARED TO AIR = 1. IF SPECIFIC VAPOR DENSITY OF PRODUCT IS NOT KNOWN, THE VALUE IS EXPRESSED AS LIGHTER OR HEAVIER THAN AIR.

SPECIFIC GRAVITY: COMPARED TO WATER = 1. IF SPECIFIC GRAVITY OF PRODUCT IS NOT KNOWN, THE VALUE IS EXPRESSED AS LESS THAN OR GREATER THAN WATER.

pH: IF APPLICABLE.

PERCENT VOLATILES: PERCENTAGE OF MATERIAL WITH INITIAL BOILING POINT BELOW 425 DEGREES FAHRENHEIT.

EVAPORATION RATE: INDICATED AS FASTER OR SLOWER THAN ETHYL ETHER, UNLESS OTHERWISE STATED.

SECTION IV
FIRE AND EXPLOSION INFORMATION

FLASH POINT: METHOD IDENTIFIED.

EXPLOSION LIMITS: FOR PRODUCT IF KNOWN. THE LOWEST VALUE OF THE COMPONENTS IS LISTED FOR MIXTURES.

HAZARDOUS DECOMPOSITION PRODUCTS: KNOWN OR EXPECTED HAZARDOUS PRODUCTS RESULTING FROM HEATING, BURNING, OR OTHER REACTIONS.

SECTION IV (CONT.)

EXTINGUISHING MEDIA: FOLLOWING NATIONAL FIRE PROTECTION ASSOCIATION CRITERIA.

FIREFIGHTING PROCEDURES: MINIMUM EQUIPMENT TO PROTECT FIREFIGHTERS FROM TOXIC PRODUCTS OF VAPORIZATION, COMBUSTION OR DECOMPOSITION IN FIRE SITUATIONS. OTHER FIREFIGHTING HAZARDS MAY ALSO BE INDICATED.

SPECIAL FIRE AND EXPLOSION HAZARDS: STATES HAZARDS NOT COVERED BY OTHER SECTIONS.

NFPA CODES: HAZARD RATINGS ASSIGNED BY THE NATIONAL FIRE PROTECTION ASSOCIATION.

SECTION V
HEALTH HAZARD DATA

PERMISSIBLE EXPOSURE LIMIT: FOR PRODUCT.

THRESHOLD LIMIT VALUE: FOR PRODUCT.

EFFECTS OF ACUTE OVEREXPOSURE: POTENTIAL LOCAL AND SYSTEMIC EFFECTS DUE TO SINGLE OR SHORT TERM OVEREXPOSURE TO THE EYES AND SKIN OR THROUGH INHALATION OR INGESTION.

EFFECTS OF CHRONIC OVEREXPOSURE: POTENTIAL LOCAL AND SYSTEMIC EFFECTS DUE TO REPEATED OR LONG TERM OVEREXPOSURE TO THE EYES AND SKIN OR THROUGH INHALATION OR INGESTION.

FIRST AID: PROCEDURES TO BE FOLLOWED WHEN DEALING WITH ACCIDENTAL OVEREXPOSURES.

PRIMARY ROUTE OF ENTRY: BASED ON PROPERTIES AND EXPECTED USE.

SECTION VI
REACTIVITY DATA

HAZARDOUS POLYMERIZATION: CONDITIONS TO AVOID TO PREVENT HAZARDOUS POLYMERIZATION RESULTING IN A LARGE RELEASE OF ENERGY.

STABILITY: CONDITIONS TO AVOID TO PREVENT HAZARDOUS OR VIOLENT DECOMPOSITION.

INCOMPATIBILITY: MATERIALS AND CONDITIONS TO AVOID TO PREVENT HAZARDOUS REACTIONS.

SECTION VII
SPILL OR LEAK PROCEDURES

REASONABLE PRECAUTIONS TO BE TAKEN AND METHODS OF CONTAINMENT, CLEAN-UP AND DISPOSAL. CONSULT FEDERAL, STATE AND LOCAL REGULATIONS FOR ACCEPTED PROCEDURES AND ANY REPORTING OR NOTIFICATION REQUIREMENTS.

SECTION VIII
PROTECTIVE EQUIPMENT TO BE USED

PROTECTIVE EQUIPMENT WHICH MAY BE NEEDED WHEN HANDLING THE PRODUCT.

SECTION IX
SPECIAL PRECAUTIONS OR OTHER COMMENTS

COVERS ANY RELEVANT POINTS NOT PREVIOUSLY MENTIONED.

ADDITIONAL COMMENTS

CONTAINERS SHOULD BE EITHER RECONDITIONED BY CERTIFIED FIRMS OR PROPERLY DISPOSED OF BY APPROVED FIRMS. DISPOSAL OF CONTAINERS SHOULD BE IN ACCORDANCE WITH APPLICABLE LAWS AND REGULATIONS. "EMPTY" DRUMS SHOULD NOT BE GIVEN TO INDIVIDUALS. SERIOUS ACCIDENTS HAVE RESULTED FROM THE MISUSE OF "EMPTIED" CONTAINERS (DRUMS, PAILS, ETC.). REFER TO SECTIONS IV AND IX.