**SECTION I - PRODUCT IDENTIFICATION**

**Product Name:** ALL CLIMATE 20W50

**VAY RODMAN**

**RISK MANAGEMENT OFFICE**

**UW - WHITENATER**

**LIBRARY ROOM 2008**

**WHITENATER WI 53190**

**PRODUCT:** REGS

**INVOICE DATE:** 08/01/94

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**SECTION II - COMPONENTS**

*If present, IARC, NTP and OSHA CARCINOGENS and CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SARA TITLE III SECTION 313 ARE IDENTIFIED IN THIS SECTION. SEE DEFINITION PAGE FOR CLARIFICATION.*

<table>
<thead>
<tr>
<th>INGREDIENT</th>
<th>Percent</th>
<th>PEL</th>
<th>TLV</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>DETERGENT/DISPERSANT ENGINE OIL PACKAGE</td>
<td>10-15</td>
<td></td>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td>LUBE OIL ADDITIVE</td>
<td>1-10</td>
<td></td>
<td></td>
<td>(2)</td>
</tr>
<tr>
<td>PETROLEUM LUBE OIL</td>
<td>70-85</td>
<td>5 MG/M3</td>
<td>5 MG/M3</td>
<td>(3)</td>
</tr>
</tbody>
</table>

**Notes:**

(1) THIS PROPRIETARY MATERIAL CONTAINS 13% ZINC COMPOUNDS. ZINC COMPOUNDS ARE REPORTABLE UNDER SECTION 313 OF SARA TITLE III.

(2) PEL/TLV NOT ESTABLISHED FOR THIS MATERIAL

(3) PEL/TLV IS FOR OIL MIST. ACGIH SHORT TERM EXPOSURE LIMIT (STEL) FOR OIL MIST IS 10 MG/CUM.

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**SECTION III - PHYSICAL DATA**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point</td>
<td>590.00 Deg F</td>
</tr>
<tr>
<td></td>
<td>310.00 Deg C</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>HEAVIER THAN AIR</td>
</tr>
<tr>
<td>Specific Vapor Density</td>
<td>0.889</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>60.00 Deg F</td>
</tr>
<tr>
<td></td>
<td>15.00 Deg C</td>
</tr>
<tr>
<td>Percent Volatiles</td>
<td>NOT APPLICABLE</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>SLOWER THAN ETHER</td>
</tr>
<tr>
<td>Appearance</td>
<td>LIGHT AMBER</td>
</tr>
<tr>
<td>State</td>
<td>LIQUID</td>
</tr>
<tr>
<td>Form</td>
<td>HOMOG SOLN</td>
</tr>
</tbody>
</table>

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**SECTION IV - FIRE AND EXPLOSION INFORMATION**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point (COC)</td>
<td>450.0 Deg F</td>
</tr>
<tr>
<td></td>
<td>(232.2 Deg C)</td>
</tr>
<tr>
<td>Explosive Limit</td>
<td>UNAVAILABLE</td>
</tr>
<tr>
<td>Extinguishing Media</td>
<td>REGULAR FOAM OR CARBON DIOXIDE OR DRY CHEMICAL</td>
</tr>
<tr>
<td>Hazardous Decomposition Products</td>
<td>MAY FORM TOXIC MATERIALS: CARBON DIOXIDE AND CARBON MONOXIDE, VARIOUS HYDROCARBONS, OXIDES OF SULFUR, NITROGEN AND PHOSPHORUS, ETC.</td>
</tr>
<tr>
<td>Firefighting Procedures</td>
<td>WEAR SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACEPIECE OPERATED IN THE POSITIVE PRESSURE DEMAND MODE WHEN FIGHTING FIRES. WATER OR FOAM MAY CAUSE FROTHING WHICH CAN BE VIOLENT AND POSSIBLY ENDANGER THE LIFE OF THE FIREFIGHTER, ESPECIALLY IF SPRAYED INTO CONTAINERS OF HOT, BURNING LIQUID. DENSE SMOKE MAY BE GENERATED WHILE BURNING. SPECIAL FIRE &amp; EXPLOSION HAZARDS: NEVER USE WELDING OR CUTTING TORCH ON OR NEAR DRUM (EVEN EMPTY) BECAUSE PRODUCT (EVEN JUST RESIDUE) CAN IGNITE EXPLOSIVELY.</td>
</tr>
<tr>
<td>NFPA Codes</td>
<td>HEALTH- 1 FLAMMABILITY- 1 REACTIVITY- 0</td>
</tr>
</tbody>
</table>

CONTINUED ON PAGE: 2
ALL CLIMATE 20W50

SECTION V-HEALTH HAZARD DATA

PERMISSIBLE EXPOSURE LEVEL: NOT ESTABLISHED FOR PRODUCT. SEE SECTION II.

EFFECTS OF ACUTE OVEREXPOSURE:

EYES: EXPOSURE IS NOT EXPECTED TO CAUSE EYE IRRITATION OR INJURY.
SKIN: PROLONGED OR REPEATED CONTACT MAY BE MILDLY IRRITATING TO SKIN AND MAY CAUSE DERMATITIS.
SWALLOWING: NOT EXPECTED TO BE TOXIC BY INGESTION. PRODUCT HAS LAXATIVE PROPERTIES AND MAY CAUSE NAUSEA, ABDOMINAL CRAMP AND DIARRHEA.
INHALATION: NOT EXPECTED TO BE AN INHALATION HAZARD AT NORMAL ROOM TEMPERATURE. HOWEVER, IF EXPOSURES EXCEED THE PEL/TLV OF 5 MG/MS FOR OIL MIST, THEN INHALATION OF MIST MAY RESULT IN RESPIRATORY IRRITATION AND POSSIBLE DISCOMFORT.

FIRST AID:
IF ON SKIN: THOROUGHLY WASH EXPOSED AREA WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING. LAUNDER CONTAMINATED CLOTHING BEFORE RE-USE.
IF IN EYES: FLUSH WITH LARGE AMOUNTS OF WATER, LIFTING UPPER AND LOWER LIDS OCCASIONALLY. IF IRRITATION PERSISTS, GET MEDICAL ATTENTION.
IF SWALLOWED: DO NOT INDUCE VOMITING, KEEP PERSON WARM AND QUIET, AND GET MEDICAL ATTENTION.
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:
NONE CURRENTLY KNOWN FOR THE PRODUCT.

CAUTION: USED MOTOR OIL HAS BEEN SHOWN TO CAUSE SKIN CANCER IN CERTAIN LABORATORY ANIMALS CONTINUALLY EXPOSED TO USED MOTOR OIL BY REPEATED APPLICATIONS. AVOID PROLONGED OR REPEATED CONTACT TO SKIN.

SECTION VI-REACTIVITY DATA

HAZARDOUS POLYMERIZATION: CANNOT OCCUR
STABILITY: STABLE
INCOMPATIBILITY: AVOID CONTACT WITH; STRONG OXIDIZING AGENTS

SECTION VII-SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
SMALL SPILL: ABSORB LIQUID ON VERMICULITE, FLOOR ABSORBENT OR OTHER ABSORBENT MATERIAL.
LARGE SPILL: PREVENT RUN-OFF TO SEWERS, STREAMS OR OTHER BODIES OF WATER. IF RUN-OFF OCCURS, NOTIFY PROPER AUTHORITIES AS REQUIRED, THAT A SPILL HAS OCCURRED.
PERSONS NOT WEARING PROTECTIVE EQUIPMENT SHOULD BE EXCLUDED FROM AREA OF SPILL UNTIL CLEAN-UP HAS BEEN COMPLETED. STOP SPILL AT SOURCE, DISTRIBUTE AREA SPILL TO PREVENT SPREADING. PUMP LIQUID INTO SALVAGE TANK. REMAINING LIQUID MAY BE TAKEN UP ON SAND, CLAY, EARTH, FLOOR ABSORBENT, OR OTHER ABSORBENT MATERIAL AND SHOVELLED INTO CONTAINERS.

WASTE DISPOSAL METHOD:
SMALL SPILL: DISPOSE OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.
LARGE SPILL: DISPOSE OF IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

SECTION VIII-PROTECTIVE EQUIPMENT TO BE USED

RESPIRATORY PROTECTION: NOT REQUIRED UNDER NORMAL CONDITIONS OF USE. HOWEVER, IF OIL MISTS ARE GENERATED ABOVE RECOMMENDED PEL/TLV OF 5 MG/MS, THEN A NIOSH/MSHA APPROVED RESPIRATOR IS ADVISED IN ABSENCE OF PROPER ENVIRONMENTAL CONTROL. (SEE YOUR INDUSTRIAL HYGIENIST).
VENTILATION: NOT REQUIRED UNDER NORMAL CONDITIONS OF USE. HOWEVER, IF UNUSUAL OPERATING CONDITIONS EXIST, THEN PROVIDE SUFFICIENT MECHANICAL (GENERAL AND/OR LOCAL EXHAUST) VENTILATION TO MAINTAIN EXPOSURE BELOW PEL/TLV (5).
PROTECTIVE GLOVES: NOT NORMALLY REQUIRED. HOWEVER, WEAR RESISTANT GLOVES SUCH AS NITRILE RUBBER TO PREVENT IRRITATION WHICH MAY RESULT FROM PROLONGED OR REPEATED SKIN CONTACT WITH PRODUCT.
EYE PROTECTION: NOT REQUIRED UNDER NORMAL CONDITIONS OF USE. HOWEVER, IF MISTING OR SPLASHING CONDITIONS EXIST, THEN SAFETY GLASSES OR CHEMICAL SPLASH GOGGLES ARE ADVISED.
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 MANUFACTURER OR NOT. RECIPIENTS ARE ADVISED TO CONFIRM IN ADVANCE OF NEED THAT THE INFORMATION IS CURRENT, APPLICABLE, AND SUITABLE TO THEIR CIRCUMSTANCES.

SECTION X-LABEL INFORMATION

CAUTION:
MAY CAUSE SLIGHT EYE IRRITATION.
PROLONGED OR REPEATED CONTACT MAY CAUSE SKIN DISORDERS.
INHALATION OF OIL MIST MAY CAUSE RESPIRATORY IRRITATION.
SWALLOWING MAY CAUSE STOMACH CRAMPS AND DIARRHEA.

HANDLING & STORAGE:

AVOID CONTACT WITH EYES AND SKIN. WEAR SAFETY GLASSES OR GOGGLES, RESISTANT GLOVES, AND OTHER APPROPRIATE PROTECTIVE EQUIPMENT ESSENTIAL FOR YOUR OPERATION. KEEP WORKPLACE AIRBORNE CONCENTRATIONS BELOW LEGAL AND RECOMMENDED LIMITS. USE NIOSH-APPROVED RESPIRATOR IF EXPOSED TO OIL MIST. DO NOT TRANSFER TO UNELABELED CONTAINER. DO NOT USE CUTTING OR WELDING TORCH ON THIS CONTAINER (EVEN EMPTY). BEFORE USE, REVIEW MATERIAL SAFETY DATA SHEET FOR MORE DETAILED INFORMATION, INCLUDING CHRONIC HEALTH EFFECTS.

FIRST AID:

EYES: FLUSH THOROUGHLY WITH WATER. GET MEDICAL ATTENTION IF IRRITATION PERSISTS.
SKIN: WASH EXPOSED AREAS WITH SOAP AND WATER. GET MEDICAL ATTENTION IF SKIN DISORDERS DEVELOP.
INHALATION: IF AFFECTED BY OIL MIST, REMOVE TO FRESH AIR.
INGESTION: DO NOT INDUCE VOMITING. CALL A PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY.

CHRONIC INFORMATION:

OVEREXPOSURE CURRENTLY UNKNOWN FOR THE PRODUCT. CAUTION! USED MOTOR OIL HAS BEEN SHOWN TO CAUSE SKIN CANCER IN CERTAIN LABORATORY ANIMALS CONTINUALLY EXPOSED TO USED MOTOR OIL BY REPEATED APPLICATIONS. AVOID PROLONGED OR REPEATED CONTACT TO SKIN. CONTAINS: PETROLEUM OIL AND PROPRIETARY ENGINE OIL ADDITIVES.

*** COMPONENTS APPEAR IN SECTION II ***
DEFINITIONS

This definition page is intended for use with Material Safety Data Sheets supplied by the Valvoline Oil 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 above 0.1% in the product. Negative conclusions concerning carcinogenicity are not reported. Additional health information may be found in Section V. Components subject to the reporting requirements of Section 313 of SARA Title III are identified in the footnotes in this section, along with typical percentages. Other components may be listed if deemed appropriate.

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 and vapor pressure above 0.1mm Hg at 88 F.

EVAPORATION RATE: Indicated as faster or slower than ETHYL ETHER, unless otherwise stated.

SECTION IV

FIRE AND EXPLOSION DATA

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.

EXTINGUISHING MEDIA: Following National Fire Protection Association criteria.

SECTION IV (cont.)

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 acute 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 overexposure.

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.

SECTION X

LABEL INFORMATION

Contains label information including physical and health hazard warnings, handling and first aid instructions appropriate for the product.

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. "EMPTIED" 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 V.