

MATERIAL SAFETY DATA SHEET

The Valvoline Company

Page 001

Date Prepared: 01/21/98

Date Printed: 01/31/98

MSDS No: 505.0171784-011.001

AF PLUS 15W40

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity

Product Name: AF PLUS 15W40

Product Code: 38500055

General or Generic ID: PETROLEUM BASED-LUBRICATING OIL

Company

The Valvoline Company
P.O. Box 14000
Lexington, KY 40512

Telephone Numbers

Emergency: 1-800-274-5263
Information: 1-606-357-7847

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient(s)	CAS Number	% (by weight)
ALIPHATIC PETROLEUM DISTILLATES	64742-65-0	80.0- 90.0
DETERGENT/DISPERSANT ENGINE OIL PACKAGE		9.0- 19.0
ZINC C1-C14 ALKYL DITHIOPHOSPHATE	68649-42-3	1.4- 1.4

3. HAZARDS IDENTIFICATION

Potential Health Effects

Eye

Exposure is not expected to cause eye irritation or injury.

Skin

Exposure may cause mild skin irritation. Prolonged or repeated exposure may dry the skin. Symptoms may include redness, burning, drying and cracking, and skin burns. Pre-existing skin disorders may be aggravated by exposure to this material.

Swallowing

Single dose oral toxicity is low. Swallowing small amounts during normal handling is not likely to cause harmful effects; swallowing large amounts may be harmful. This material can enter the lungs during swallowing or vomiting and cause lung inflammation and/or damage.

Inhalation

Exposure is possible under certain conditions of handling and use (for example, during heating, spraying, or stirring). Symptoms are more typically seen at air concentrations exceeding the recommended exposure limits.

Symptoms of Exposure

gastrointestinal irritation (nausea, vomiting, diarrhea), irritation (nose, throat, respiratory tract) (pre-existing lung disorders, e.g. asthma-like conditions, may be aggravated by exposure to this material), abdominal pain.

Target Organ Effects

No data

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Developmental Information

No data

Cancer Information

Used motor oil has been shown to cause skin cancer in laboratory animals continually exposed by repeated applications. Avoid prolonged or repeated skin contact.

Other Health Effects

No data

Primary Route(s) of Entry

No data

4. FIRST AID MEASURES

Eyes

If symptoms develop, move individual away from exposure and into fresh air. Flush eyes gently with water while holding eyelids apart. If symptoms persist or there is any visual difficulty, seek medical attention.

Skin

Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

Swallowing

Do not induce vomiting. This material is an aspiration hazard. If individual is drowsy or unconscious, place on left side with the head down. Seek medical attention. If possible, do not leave individual unattended.

Inhalation

If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen.

Note to Physicians

No data

5. FIRE FIGHTING MEASURES

Flash Point

> 420.0 F (215.5 C) COC

Explosive Limit

No data

Autoignition Temperature

No data

Hazardous Products of Combustion

May form: carbon dioxide and carbon monoxide, oxides of sulfur, nitrogen and phosphorus, various hydrocarbons.

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Fire and Explosion Hazards

Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. Dense smoke may be generated while burning.

Extinguishing Media

regular foam, carbon dioxide, dry chemical.

Fire Fighting Instructions

Water or foam may cause frothing which can be violent and possibly endanger the life of the firefighter. Wear a self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment. Refer to the personal protective equipment section of this MSDS.

NFPA Rating

Health - 1, Flammability - 1, Reactivity - 0

6. ACCIDENTAL RELEASE MEASURES

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, 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.

7. HANDLING AND STORAGE

Handling

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.

Storage

Not applicable

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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.

Skin Protection

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., Wear normal work clothing covering arms and legs..

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Respiratory Protections

Not required under normal conditions of use. However, if oil mists are generated above recommended PEL/TLV of 5 mg/m³, then a NIOSH/MSHA approved respirator is advised in absence of proper environmental control. (Consult your industrial hygienist.)

Engineering Controls

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 (s).

Exposure Guidelines

Component

ALIPHATIC PETROLEUM DISTILLATES (64742-65-0)
OSHA VPEL 5.000 mg/m³ - TWA Oil Mist
ACGIH TLV 5.000 mg/m³ - TWA Oil Mist

DETERGENT/DISPERSANT ENGINE OIL PACKAGE
No exposure limits established

ZINC C1-C14 ALKYLDITHIOPHOSPHATE (68649-42-3)
No exposure limits established

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point

No data

Vapor Pressure

No data

Specific Vapor Density

No data

Specific Gravity

.880 @ 60.00 F

Liquid Density

7.360 lbs/gal @ 60.00 F
.880 kg/l @ 15.60 C

Percent Volatiles (Including Water)

No data

Evaporation Rate

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Appearance

No data

State

LIQUID

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Physical Form

Not applicable

Color

AMBER

Odor

PETROLEUM

pH

Not applicable

Viscosity

3300.0 cps
14.5 - 15.5 cst

10. STABILITY AND REACTIVITY

Hazardous Polymerization

Product will not undergo hazardous polymerization.

Hazardous Decomposition

May form: carbon dioxide and carbon monoxide, oxides of sulfur, nitrogen and phosphorus, various hydrocarbons.

Chemical Stability

Stable.

Incompatibility

Avoid contact with: strong oxidizing agents.

11. TOXICOLOGICAL INFORMATION

No data

12. ECOLOGICAL INFORMATION

No data

13. DISPOSAL CONSIDERATION

Waste Management Information

Dispose of in accordance with all applicable local, state and federal regulations.

14. TRANSPORT INFORMATION

DOT Information - 49 CFR 172.101

DOT Description:

Not Regulated

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Container/Mode:
CASES/SURFACE - NO EXEMPTIONS

NOS Component:
None

RQ (Reportable Quantity) - 49 CFR 172.101
Not applicable

15. REGULATORY INFORMATION

US Federal Regulations

TSCA (Toxic Substances Control Act) Status
TSCA (UNITED STATES) The intentional ingredients of this product are listed.

CERCLA RQ - 40 CFR 302.4
None

SARA 302 Components - 40 CFR 355 Appendix A
None

Section 311/312 Hazard Class - 40 CFR 370.2
Immediate(X) Delayed(X) Fire() Reactive() Sudden Release of Pressure()

SARA 313 Components - 40 CFR 372.65

Section 313 Component(s)	CAS Number	Max %
ZINC C1-C14 ALKYLDITHIOPHOSPHATE	68649-42-3	1.39

International Regulations

Inventory Status
Not determined

State and Local Regulations

California Proposition 65
None

16. OTHER INFORMATION

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.