



## MATERIAL SAFETY DATA SHEET

### Type F ATF Automatic Transmission Fluid

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Synonyms:** ATF Type F  
**Formula:** Mixture  
**Chemical Family:** Hydrocarbon  
**CAS Number:** Mixture  
**SAP Code:** 1012710; 1012711; 1012712; 1012713  
**Product Code:** 53630  
**MSDS Number:** US001978  
**NFPA Ratings:** Health 0, Flammability 1, Reactivity 0  
**HMIS Ratings:** Flammability 1, Reactivity 0, Health 0  
**Intended Use(s):** Ford Automotive Transmissions

The intended use of this product is indicated above, if any additional use is known please contact us at the Technical Information number listed below.

**Manufactured By:**  
 Phillips 66 Company  
 A Division of Phillips Petroleum Company  
 Bartlesville, Oklahoma 74004

**Phone Numbers**  
**Emergency:** (918) 661-8118  
**Technical Information:** (800) 766-0050  
**For Additional MSDSs:** (918) 661-5974

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Specification and CAS #	Weight % In Product	ACGIH TLV (TWA)	ACGIH Short Term Exposure Limit	ACGIH Ceiling Limits	ACGIH Skin Designation	OSHA Final PEL (TWA)	OSHA - Final PELs - Ceiling Limits	OSHA - Final PELs - Skin Notation
Petroleum based lubricants 64742-54-7	0 to 90	NE	NE	NE	NE	NE	NE	NE
Base stock 64741-88-4	0 to 50	NE	NE	NE	NE	NE	NE	NE
Solvent refined petroleum oils 64741-89-5	0 to 50	NE	NE	NE	NE	NE	NE	NE
Polymethacrylate	0 to 10	NE	NE	NE	NE	NE	NE	NE
Distillate (petroleum) hydrotreated light paraffinic 64742-55-8	0 to 10	NE	NE	NE	NE	NE	NE	NE
Magnesium alkylaryl detergent	0 to 10	NE	NE	NE	NE	NE	NE	NE
Zinc dialkyldithiophosphate 68649-42-3	~ 2	NE	NE	NE	NE	NE	NE	NE
Polybutenyl succinimide/amide 67762-77-0	0 to 10	NE	NE	NE	NE	NE	NE	NE

See Section 8 for additional Exposure Limits.

## 3. HAZARDS IDENTIFICATION

## Emergency Overview

Non-Hazardous. Pressure Injection.

## Potential Acute Health Effects

**Eye Contact:** May cause mild irritation.

**Skin Contact:** May cause mild irritation with prolonged or repeated contact.

**Inhalation:** No acute effects expected due to low vapor pressure.

**Ingestion:** Practically non-toxic (LD50 > 15 gm/kg).

## Subchronic and Chronic Effects:

Prolonged and repeated exposure to oil mist poses a risk of pulmonary disease such as lung inflammation. This condition usually causes no symptoms.

**Aggravated Medical Conditions:** No Known Applicable Information

## 4. FIRST AID MEASURES

**Eye Contact:** Flush eyes with running water. If irritation or adverse symptoms develop, seek medical attention.

**Skin Contact:** Wash skin with soap and water. If irritation or adverse symptoms develop, seek medical attention.

**Inhalation:** Remove from exposure. If illness or adverse symptoms develop, seek medical attention.

**Ingestion:** If illness or adverse symptoms develop, seek medical attention.

**Notes To Physician:** For injection injuries, immediate medical treatment is required. Physicians may call the emergency number (918) 661-8118.

## 5. FIRE FIGHTING MEASURES

**Flash Point:** 350F (178C)  
**FP Method:** COC  
**Ignition Temperature:** 675F (357C) Estimated

### Flammable Limits (% by Volume in Air)

**Lower Exposure Limit -** Not Established  
**Upper Exposure Limit -** Not Established

**Fire Extinguishing Media:** Dry chemical, foam or carbon dioxide (CO<sub>2</sub>), water

**Fire Fighting Procedures:** Evacuate area and fight fire from a safe distance. Shut off source, if possible. Use NIOSH approved self-contained breathing apparatus and other protective equipment and/or garments described in Section 8 if conditions warrant. Use water spray to cool nearby containers and structures exposed to fire.

**Fire and explosion hazards:** None known.

## 6. ACCIDENTAL RELEASE MEASURES

Sweep or gather up material and place in proper container for disposal or recovery.

## 7. HANDLING AND STORAGE

Avoid contact with eyes, skin or clothing. Avoid breathing vapors, mist, fume or dust. Wash thoroughly after handling. Launder contaminated clothing before reuse. Use only with adequate ventilation. If pressure injected under the skin, can cause gangrene if not treated. Store in closed container. Store in well-ventilated area.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Eye Protection:** Wear safety glasses.

**Respiratory Protection:** For concentrations exceeding an applicable exposure limit, use NIOSH approved air purifying respirator equipped with P95 filters, for particulate with time weighted average exposure limit not less than 0.05 mg/M3.

**Skin Protection:** Use gloves resistant to the material(s) contained in this product.

**Ventilation:** Use adequate ventilation to control concentrations below applicable exposure limits.

**Other Personal Protection:** Personal protection information shown in Section 8 is based upon general information as to normal uses and conditions. Where special or unusual uses or conditions exist, it is suggested that the expert assistance of an industrial hygienist or other qualified professional be sought.

**Exposure Limits:** OSHA PEL and ACGIH TLV for oil mists is 5 mg/m3

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State:</b>	Liquid
<b>Appearance:</b>	Red Liquid
<b>Odor:</b>	Mild
<b>Odor Threshold (ppm):</b>	Unknown
<b>Boiling Point:</b>	Not Established
<b>Melting/Freeze Point:</b>	Not Established
<b>Vapor Pressure:</b>	<1 mm Hg @ 68F (20C)
<b>Vapor Density (Air=1):</b>	> 8
<b>Specific Gravity @ 20 C (Water=1):</b>	0.87 @ 60F (16C)
<b>Percent Volatile by Volume:</b>	Negligible
<b>Evaporation Rate (Butyl Acetate=1):</b>	Negligible
<b>Water Solubility:</b>	Negligible
<b>Viscosity:</b>	39.2 cSt @ 104F (40C)

## 10. STABILITY AND REACTIVITY

**Stability:** Stable

**Hazardous Polymerization:** Will Not Occur

**Incompatibility (Materials to Avoid):** Oxygen and strong oxidizing agents.

**Hazardous Decomposition Products:** Carbon oxides and various hydrocarbons are formed when burned.

## 11. TOXICOLOGICAL INFORMATION

### Other Health Effects:

Pressurized injection of product under the skin can lead to seriously inflamed tissue. If left untreated injury can become gangrenous.

Continuous skin contact with used motor oils has caused skin cancer in laboratory animals. Avoid prolonged skin contact with used motor oil.

These products may contain petroleum base oils which may be refined by various processes including severe solvent extraction, severe hydrocracking or severe hydrotreating. None of the oils require a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

## 12. ECOLOGICAL INFORMATION

No data at this time.

## 13. DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with federal, state and local regulations.

## 14. TRANSPORT INFORMATION

<b>DOT Shipping Description:</b>	Not Regulated
<b>IMDG Shipping Description:</b>	Not Regulated
<b>ICAO/IATA Proper Shipping Name:</b>	Not Regulated

## 15. REGULATORY INFORMATION

### EPA SARA 311/312 (Title III Hazard Categories)

<b>Acute Health:</b>	No
<b>Chronic Health:</b>	No
<b>Fire Hazard:</b>	No
<b>Pressure Hazard:</b>	No
<b>Reactivity Hazard:</b>	No

**Petroleum based lubricants 0 to 90 64742-54-7**  
**Regulated Substance on TSCA Inventory:** Listed  
**Canada - Domestic Substances List:** Listed

**Base stock 0 to 50 64741-88-4**  
**Regulated Substance on TSCA Inventory:** Listed  
**Canada - Domestic Substances List:** Listed

**Solvent refined petroleum oils 0 to 50 64741-89-5**  
**Regulated Substance on TSCA Inventory:** Listed  
**Massachusetts Right To Know List:** Listed  
**Canada - Domestic Substances List:** Listed

**Polymethacrylate** 0 to 10

**Regulated Substance on TSCA Inventory:** Listed

**Canada - Domestic Substances List:** Listed

**Distillate (petroleum) hydrotreated light paraffinic** 0 to 10 **64742-55-8**

**Regulated Substance on TSCA Inventory:** Listed

**Magnesium alkylaryl detergent** 0 to 10

**Regulated Substance on TSCA Inventory:** Listed

**Zinc dialkyldithiophosphate ~ 2** **68649-42-3**

**Regulated Substance on TSCA Inventory:** Listed

**Canada - Domestic Substances List:** Listed

**Polybutenyl succinimide/amide** 0 to 10 **67762-77-0**

**Regulated Substance on TSCA Inventory:** Listed

**Canada - Domestic Substances List:** Listed

## 16. OTHER INFORMATION

### Revision Summary:

Section 3 - Format change.

**Preparer:** Health, Environment and Safety Department

**Date Prepared:** 05/11/2001

**Supersedes:** 04/20/2001

### Disclaimer

Phillips Petroleum Company (references to Phillips Petroleum Company or Phillips includes its divisions, affiliates and subsidiaries) believes that the information contained herein (including data and statements) is accurate as of the date hereof. NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE AS CONCERNS THE INFORMATION HEREIN PROVIDED. The information provided herein relates only to the specific product designated and may not be valid where such product is used in combination with any other materials or in any process. Further, since the conditions and methods of use of the product and information referred to herein are beyond the control of Phillips, Phillips expressly disclaim any and all liability as to any results obtained or arising from any use of the product or such information. No statement made herein shall be construed as a permission or recommendation for the use of any product in a manner that might infringe existing patents.