Material Safety Data Sheet

Trade Name: CITGO Automatic Transmission Fluid - Type F
Commodity Code: 33-105
CAS No.: Mixture
(Refer to Section 1.0)
Comm. Code: 33-105

Material Hazard Evaluation


Health: Final Product Non-Hazardous

Precautionary Statement: Avoid prolonged skin contact.

HMIS Rating: Health 0 Flammability 1 Reactivity 0

1.0 Generic Composition / Components

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS #</th>
<th>%</th>
<th>Hazard Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refined Petroleum Oil(s)</td>
<td>64741-89-5, 64741-88-4</td>
<td>&gt; 85</td>
<td>Oral LD50(rat): &gt; 15g/kg Eye: Practically Non-Irritating Skin: Practically Non-Irritating Ihin LC50/4H(rat): &gt; 5,000mg/m³</td>
</tr>
<tr>
<td>Refined Naphtenic Oil(s)</td>
<td>64742-53-6</td>
<td>&lt; 15</td>
<td>Oral LD50(rat): &gt; 5g/kg Eye: Irritant Dermal: Irritant</td>
</tr>
<tr>
<td>VI Improver Rust, corrosion and oxidation inhibitor package (contains zinc dialkyldithiophosphate, calcium phenate)</td>
<td>Mixture</td>
<td>&lt; 8</td>
<td>Eye: Irritant Dermal: Irritant</td>
</tr>
<tr>
<td>Dye</td>
<td>Mixture</td>
<td>&lt; 0.1</td>
<td>Oral LD50(rat): &gt; 20.8g/kg Dermal: LD50(rab): &gt; 10.2g/kg</td>
</tr>
</tbody>
</table>

1 Hazard Rating: least-0; slight-1; moderate-2; high-3; extreme-4

CITGO assignment based on our evaluation per NFPA and NPMA guidelines.
2.0 Physical Data

Physical Hazard Classification (Per 29 CFR Part 1910.1200)

<table>
<thead>
<tr>
<th>No</th>
<th>Combustible</th>
<th>No</th>
<th>Flammable</th>
<th>No</th>
<th>Pyrophoric</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>Compressed Gas</td>
<td>No</td>
<td>Organic Peroxide</td>
<td>No</td>
<td>Reactivity</td>
</tr>
<tr>
<td>No</td>
<td>Explosive</td>
<td>No</td>
<td>Oxidizer</td>
<td>Yes</td>
<td>Stable</td>
</tr>
</tbody>
</table>

- Boiling Point, 760 mmHg, °C(°F): ~343 (~650)
- Specific Gravity (60/60°F) (H₂O = 1): 0.87
- Vapor Density (Air = 1): > 1
- % Volatiles by Volume: Negligible
- Melting Point, °C(°F): NA
- Vapor Pressure, mmHg (25°C): ~ < 8x10⁻³
- Solubility in H₂O, % by Weight: Negligible
- Evaporation Rate (Butyl Acetate = 1): < 1
- pH of Undiluted Product: NA
- Appearance and Odor: Red liquid - mild odor.

3.0 Fire and Explosion Data

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point, COC, °C(°F)</td>
<td>204(399)</td>
</tr>
<tr>
<td>Flash Point, PM, °C(°F)</td>
<td>186(367)</td>
</tr>
<tr>
<td>Fire Point, COC, °C(°F)</td>
<td>224(435)</td>
</tr>
<tr>
<td>NFPA Rating²</td>
<td>Health: 0  Flammability: 1  Reactivity: 0</td>
</tr>
<tr>
<td>Flammable Limits (% by volume in air)</td>
<td>Lower: NA  Upper: NA</td>
</tr>
<tr>
<td>Extinguishing Media</td>
<td>CO₂, dry chemical, foam, water fog</td>
</tr>
<tr>
<td>Special Fire Fighting Procedure</td>
<td>None.</td>
</tr>
<tr>
<td>Unusual Fire or Explosion Hazard</td>
<td>Water may cause frothing.</td>
</tr>
</tbody>
</table>

4.0 Reactivity Data

- **Stability:** Stable
- **Conditions Contributing to Instability:** None.
- **Incompatibility:** Strong oxidants.
- **Hazardous Decomposition Products:**
  - (thermal, unless otherwise specified)
  - CO₂ (CO under incomplete combustion), Traces of oxides of P, S and Zn.
- **Conditions Contributing to Hazardous Polymerization:** None.

² Hazard Rating: least-0; slight-1; moderate-2; high-3; extreme-4
Citgo assignment based on our evaluation per NFPA guidelines.
5.0 Spill or Leak Procedures

Procedures if Material is Spilled:

- Remove sources of heat or ignition, provide adequate ventilation, contain leak.
- **Small Spills:** Absorb with suitable material such as rags, straw, or sand. Place into containers for later removal.
- **Large Spills:** Contain spill in earthen dikes for later recovery.
- Report spills as required to appropriate authorities.

Waste Disposal:

- It is the responsibility of the user to determine if the material is a hazardous waste at the time of disposal.
- Check before disposing to be sure you are in compliance with all applicable laws and regulations.
- Chemtrec/RCRA Emergency Hotline Number: 800-424-9346.

Protective Measures During Repair and Maintenance of Contaminated Equipment:

- Refer to Section VII - Special Protection Information.
- Wash exposed skin thoroughly with soap and water.
- Avoid prolonged contact with used oil.
- Remove soiled clothing.
- Use oil impervious gloves if frequent or prolonged contact is expected.

6.0 Health Hazard Data

**Health Hazard Classification**

(Per 29 CFR Part 1910.1200)

<table>
<thead>
<tr>
<th>No</th>
<th>Carcinogen</th>
<th>No</th>
<th>Corrosive</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>Animal Carcinogen</td>
<td>No</td>
<td>Irritant</td>
</tr>
<tr>
<td>No</td>
<td>Suspect Carcinogen</td>
<td>No</td>
<td>Sensitizer</td>
</tr>
<tr>
<td>No</td>
<td>Mutagen</td>
<td>No</td>
<td>Teratogen</td>
</tr>
<tr>
<td>No</td>
<td>Highly Toxic</td>
<td>No</td>
<td>Target Organ</td>
</tr>
<tr>
<td>No</td>
<td>Toxic</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Product listed as Carcinogen or Potential Carcinogen by:

- NTP No
- IARC No
- OSHA No
- Other No

Toxicity Summary: Practically non-toxic.

Major Route(s) of Entry: Inhalation of incidental mists or vapors.
7.0 Special Protection Information

Ventilation Requirements: Use in well ventilated area. In confined space, mechanical ventilation may be required to keep levels of certain components below mandated standards, as evaluated by designated personnel.

Permitted Threshold Air Concentrations:
Mineral Oil Mist  
TLV-TWA 5 mg/m³  OSHA-PEL 5/mg/m³
TLV-STEL 10 mg/m³  OSHA-STEL ND
TLV-Ceiling ND  OSHA-Ceiling ND
OSHA-Peak ND

Specific Personal Protective Equipment:
Respiratory: Normally none required. If high vapor or mist concentrations expected - use respirator approved for organic vapors and mists.

Eyes: Safety goggles, or chemical splash goggles if splashing is anticipated.

Dermal: Oil impervious gloves if frequent or prolonged contact is expected.

Other Clothing or Equipment: Wear body-covering work clothes to avoid prolonged or repeated exposure. Launder soiled work clothes before reuse.

8.0 Transportation and Special Precautions

Storage: Do not apply high heat or flame to container. Keep separate from strong oxidizing agents.

Caution: Empty containers may contain product residue which could include flammable or explosive vapors.

Consult appropriate Federal, State and Local authorities before reusing, reconditioning, reclaiming, recycling or disposing of empty containers and/or waste residues of this product.

DOT Information

DOT/UN Shipping Name: Petroleum Lubricating Oil
DOT Hazard Class: Non-Hazardous
DOT/UN Hazard Identification Number: None assigned
DOT Shipping Container Restrictions: None
DOT Placard: None

NA - Not Applicable  ND - No Data  NE - Not Established
9.0 Environmental Data

Product Name: CITGO Automatic Transmission Fluid - Type F
Commodity Code: 33-105

SARA TITLE III

Section 313 - Toxic Chemicals

This product does contain toxic chemicals of Section 313 of Title III of Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

Components | CAS# | %
---------------------|-------|---
Zinc Dialkyldithiophosphates | 68649-42-3 | < 4

Section 311 - Hazard Categories

Yes  No
Not Applicable  Fire Hazard
Acute (Immediate Health Hazard)  Sudden Release of Pressure Hazard
Chronic (Delayed Health Hazard)  Reactive Hazard

Section 302/(A) - Extremely Hazardous Substances

(RQ = Reportable Quantity)
(TPQ = Threshold Planning Quantity)

This product does not contain Extremely Hazardous Substances of Section 302/(A).

Component | CAS# | % | RQ lbs. | TPQ lbs.
---------------------|-------|---|-----|-----
None  -  -  -

Clean Water Act

Under Section 311 (b) (4) of the Clean Water Act, discharges of crude oil and petroleum products in any kind or form to surface waters must be immediately reported to the National Response Center: 800-424-8802.

Comprehensive Environmental, Response, Compensation & Liability Act (CERCLA) - Section 102 Hazardous Substances

Component | CAS# | % | RQ lbs.
---------------------|-------|---|-----

Petroleum and petroleum fractions are excluded from the list of CERCLA hazardous substances by Section 101(14) of CERCLA.

New Jersey Worker and Community Right-to-Know Act

Petroleum Oil
10.0 Labeling

**NOTE**
This product has been determined not to be a physical or a health hazard as defined by the OSHA Hazard Communication Standard.