



# Material Safety Data Sheet

**Product name:**

**ELF ELFMATIC LE**

Page: 1/5

Product Code: 110325-08

Issue: 1

Date: 12/02/2008

Supersedes MSDS of: 01/07/2005

## PRODUCT LABELS

LABELLING (standard or EU): Not Applicable

R-phrases: None

S-phrases: None

TRANSPORT LABELLING: Not Applicable

## 1. Identification of the substance/preparation and of the company undertaking

Name of the product: **ELF ELFMATIC LE**  
Code No : SDT009  
Product application: Automotive Transmission Fluid  
Supplier: Total Oil Asia-Pacific Pte. Ltd.  
10 Pandan Avenue Singapore 609385  
Tel : (65) 6266 2800  
Fax: (65) 6266 3800

## 2. Composition / Information on Ingredients

PREPARATION:

Chemical nature: Petroleum-derived severely refined mineral-base product, in which the polycyclic aromatic hydrocarbons (PCA or PAH) content, measured by IP 346 is less than 3%

Substances presenting a health hazards:	EC No.	CAS No	Content	Symbol(s)	R-phrases
Ethoxylated Amine			<0.22%		

See section 16 for explanation of R-phrases:

## 3. Hazard Identification

- Health effects: Under normal conditions of use, the product holds no danger of intoxication  
-Environmental impact: Do not discard this product into the environment  
-Physical and chemical hazards: No specific risk of fire or explosion under normal conditions of use

## 4. First Aid Measures

IN CASE OF SERIOUS OR PERSISTENT MANIFESTATIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE

-Inhalation: Inhalation of heavy concentrations of vapour, fumes or spray, may cause mild irritation of the throat.  
Transport the person into fresh air, keep warm and allow to rest  
- Skin contact: Immediately remove all soiled or stained clothing  
Wash the affected area immediately and repeatedly with soap and water  
- Eye contact: Keep eyes open and rinse immediately and repeatedly with water for at least 15 minutes  
-Ingestion: Possible risk of vomiting and diarrhea  
Do not induce vomiting to avoid risk of aspiration into the respiratory tract  
Give nothing to drink  
-Aspiration: If the product is believed to have entered the lungs (in case of vomiting, for example),



# Material Safety Data Sheet

Product name:

**ELF ELFMATIC LE**

Page: 2/5

Product Code: 110325-08

Issue: 1

Date: 12/02/2008

Supersedes MSDS of: 01/07/2005

take the person to hospital for immediate care

## 5. Fire Fighting Measures

Flash Point: See heading 9

Fire extinguishers media:

- suitable: Foam, carbon dioxide (CO<sub>2</sub>), powder

- not recommended: Do not use water jet (stick jets) for extinguishing fire since they could help to spread the flames.

Specific hazards: Incomplete combustion and thermolysis produce gases of varying toxicity such as CO, CO<sub>2</sub>, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled.

Protective measures for firefighter: Insulated breathing apparatus must be worn in confined premises with heavy concentrations of fumes and gases.

## 6. Accidental Release Measures

See sections 8 and 13

After spillage / leakage:

- on the soil: Surfaces on which the product has been spilled may become slippery.

Do not allow the product to enter sewers or rivers or contaminate the soil.

Recover with mechanical means such as pumps and skimmers.

- on water: Floating absorbent material, then mechanical recovery.

If the product is spilled in a river or in the sewers, notify the authorities of the possible presence of floating items.

## 7. Handling and Storage

HANDLING:

- Prevention of user exposure: Ventilate extensively if the formation of vapour, fumes, mist or aerosol is a risk. Make all the necessary arrangement in order to reduce exposure risk, notably to product in use or to wastes.

Keep away from combustive substances; keep away from food and beverages

- Prevention of fire and explosion: Empty containers may contain flammable or explosive vapours. There is a fire hazard associated with rags, papers or any other material used to remove spills which become soaked with product.

- Precautions: Avoid static electricity build up with connection to earth. Set up machinery and equipment so as to avoid the risk of accidental spills or splashes onto hot machine parts and electrical contacts (on joints failure, for example).

STORAGE:

- Technical measures: Make the necessary arrangements to prevent water and soil pollution

- Storage conditions:

- Suitable: Store at room temperature, protected against contact with water and moisture, and away from any source of ignition.

Keep containers closed when not in use



# Material Safety Data Sheet

Product name:

**ELF ELFMATIC LE**

Page: 3/5

Product Code: 110325-08

Issue: 1

Date: 12/02/2008

Supersedes MSDS of: 01/07/2005

- To be avoided:	Do not store exposed to the elements
- Incompatible products:	Dangerous reaction with strong oxidizing agents
- Packaging materials	Recommended: Use only hydrocarbon resistant containers, joints, pipes etc... Keep in original container if possible

## 8. Exposure Controls / Personal Protection

- Technical measures:	Use the product in a properly ventilated atmosphere. When working in enclosed place (tanks, reservoirs,...), make sure that atmosphere is not suffocating and/ or wear recommended equipment.
- Occupational exposure limit:	.oil mist: 10mg/m <sup>3</sup> , for 15 minutes .oil mist: 5mg/m <sup>3</sup> , for 8 hours
- Hand protection:	Impermeable hydrocarbon-proof gloves Recommended material: nitrile, neoprene
- Eye protection:	Goggles, in case of splashing
- Skin and body (other than the hands) protection:	As required, wear a face mask, hydrocarbon-proof clothing, and safety boots (when handling drums) Don't wear ring, watch or similar thing which will be able to hold the product and may give rise to some skin diseases.
Hygienic work practices:	Avoid prolonged and repeated contact with the skin, especially with used or waste product. Immediately remove all soiled or stained clothing. If the product comes into contact with the skin, wash the affected area immediately and repeatedly with soap and water Use no abrasives, solvents or fuels Do not use cloths stained with the product to dry hands Do not put the product-soaked rags in the pockets of working clothes Do not eat, drink or smoke while handling the product

## 9. Physical and Chemical Properties

- Appearance:	Clear Liquid
- Colour	Red
- Odour:	Characteristics
- Density/specific gravity	about 863 kg/m <sup>3</sup> at 15°C
Flash point:	>200°C (ASTM D92)
Auto-ignition temperature:	>250°C (ASTM E 659). This temperature may be significantly lower under particular conditions (slow oxidation on fine divided materials...)
Viscosity:	Kinematic viscosity at 100°C : about 7.5 mm <sup>2</sup> /s

## 10. Stability and reactivity

Stability:	The product is stable under normal storage, handling and use temperatures.
- Condition to avoid:	Heat (temperatures above flash point), sparks, ignition points, flames, static electricity
- Materials to avoid:	Avoid contact with strong oxidizing agents
- Hazardous decomposition products:	Incomplete combustion and thermolysis produce more or less toxic gases such as



# Material Safety Data Sheet

**Product name:**

**ELF ELFMATIC LE**

Page: 4/5

Product Code: 110325-08

Issue: 1

Date: 12/02/2008

Supersedes MSDS of: 01/07/2005

CO, CO<sub>2</sub>, various hydrocarbons, aldehydes and soot

## 11. Toxicological Information

### ACUTE TOXICITY / LOCAL EFFECTS:

- Inhalation, comments: Risk is improbable under normal conditions of use  
Inhalation of important concentration of vapour or aerosols may cause irritation of the upper respiratory tract.
- Skin contact, comments: Risk is improbable under normal conditions of use
- Ingestion, comments: In case of ingestion of small quantities, no important effect observed.  
In case of ingestion of larger amounts: abdominal pain, diarrhea,...

### CHRONIC TOXICITY OR LONG TERM TOXICITY:

- Skin contact: Characteristics skin affections (oil blisters) may develop following prolonged and repeated exposure through contact with stained clothing
- Sensitization: To our knowledge, the product do not induce sensitization
- Carginogenicity: During use in engines, contamination of oil with low level of combustion occurs.  
Used motor oils have been shown to cause skin cancer in mice following repeated application and continuous exposure  
Brief or intermittent skin contact with used oil is not expected to have serious effects in human if the oil is thoroughly removed by washing with soap and water.

## 12. Ecological Information

- Comments about ecotoxicity: Experimental data on the finished product are not available  
No information available for used product  
it is considered to present a little danger for aquatic life
- Mobility:
- Air: There is a slow loss by evaporation
  - Ground: Given its physical and chemical characteristics, the product generally shows little mobility in the ground.
  - Water: The product is insoluble; it spreads on the surface of the water.

## 13. Disposal information

- Waste disposal: Dispose in a safe manner in accordance with local regulations.  
If need be, collection by an authorized waste collector and regeneration or incineration in an approved installation
- Waste class: 13-02-02 (non-chlorinated engine, gear, lubricating oils)
- Disposal of contaminated packaging: Conform to the local regulation in effect.

## 14. Transport Information

- Not concerned by the regulatory below
- Road (ADR) / Rail (RID): Not restricted for transport
- Transport by barge (ADNR):
- Marine (IMO-IMDG):
- Air (ICAO / IATA):



## Material Safety Data Sheet

**Product name:**

**ELF ELFMATIC LE**

Page: 5/5

Product Code: 110325-08

Issue: 1

Date: 12/02/2008

Supersedes MSDS of: 01/07/2005

### 15. Regulatory Information

- Risk phrase(s):	None
- Safety phrase(s):	None
- EU directives:	Hazardous preparations directive 1999/45/EC modified (Directive 2001/60/EC)
- Social Security code:	Art. L 461-6, Art. D461-1, appendix A, No. 601. Table of occupational illnesses and diseases No. 36
- labor code:	Art. R 241-50, decree of 07.11.1977

### 16. Other information

This sheet is in compliance with the standards defined by the directives 91/155/CEE, 93/112/CEE & 2001/58/EC and the Art.14 of directive 1999/45/EC.

Explanations of R Phases in section 2:	R22 -- Harmful if swallowed R36/38 -- Irritating to eyes and skin R38 -- Irritating to skin R41 -- Risk of serious damage to eye R43 -- May cause sensitisation by skin contact R51/53 -- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment R53 -- May cause long-term adverse effects in aquatic environment
--	--

"This Safety Data Sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of our knowledge at the date indicated hereabove.

It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk.

The information given herein in no way dispenses the user from knowing and applying all provisions regulating his or her activity. The user bears sole liability for the precautions required when using the product.

The regulatory texts herein are intended to aid the user to fulfill his obligations. This list is not to be considered complete and exhaustive.

It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned"

### End of document.

Number of page(s): 5