



**Product: TUTELA TRANSMISSION ZC 90**

## **MATERIAL SAFETY DATA SHEET**

### **1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

#### 1.1 PRODUCT IDENTIFIER

PRODUCT TRADE NAME:

**TUTELA TRANSMISSION ZC 90**

PRODUCT CODE: 1450

#### 1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE:

Lubricant for manual gearbox.

USES ADVISED AGAINST

This product should not be used for other purposes than those specified without the advice of an expert.

#### 1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

COMPANY IDENTIFICATION:

PETRONAS LUBRICANTS ITALY S.P.A.

0039 0119613331

10029

Tel: (Torino) - ITALY

Fax: 0039 01196131

COMPETENT PERSON RESPONSIBLE FOR SAFETY DATA OF PRODUCT:

Lucia Costa

e-mail: [lcosta@it.petronas.com](mailto:lcosta@it.petronas.com)

#### 1.4 EMERGENCY TELEPHONE NUMBER

0039 0382 24444

Pavia Poison Centre - IRCCS Maugeri Foundation, Italy



## Product: TUTELA TRANSMISSION ZC 90

### 2. HAZARDS IDENTIFICATION

#### 2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Directives 67/548/EEC or 1999/45/EC:

This product is not considered hazardous for people or for environment according to EC directives (see headings 11 and 12, too).

Regulation (EC) No 1272/2008

The classification of the product has been determined in conformity of Directives 67/548/EEC and 99/45/EC and following adjustments.

#### 2.2 LABEL ELEMENTS

This product is not labelled according to EC legislation

INDICATIONS OF DANGER

Not applicable.

CONTAINS:

RISK PHRASES

Not applicable.

SAFETY PHASES

Not applicable.

OTHER INDICATIONS:

None.

#### 2.3 OTHER HAZARDS

Prolonged or repeated skin contact sometimes may cause irritations and dermatitis.

The product is not readily biodegradable. In case of large accidental spills, it is a potential source of soil, watercourse and groundwater pollution.

## Product: TUTELA TRANSMISSION ZC 90

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.2 MIXTURES

Additive package containing dispersants, antioxidants and polymers.

Directive 67/548/EEC:

HAZARDOUS COMPONENTS	EINECS	CAS	REG_NUM	QUANTITY	SIMBOLO	R-PHRASES
Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts	270-608-0	68457-79-4	01-2119493628-22	0.8-1.0 %	Xi, N	38 - 41 - 51/53

OTHER COMPONENTS	EINECS	CAS	REG_NUM	QUANTITY	SIMBOLO	R-PHRASES
Severely refined paraffinic mineral oils (CAS n. 101316-72-7 / 101316-73-8 / 64742-58-1 / 74869-22-0 / 92045-45-9; EINECS n. 309-877-7 / 309-878-2 / 265-161-3 / 278-012-2 / 295-426-9)	Mixture	Mixture		94-99 %	-	-

R-phrases, H-phrases and list of abbreviations: see heading 16.

### 4. FIRST AID MEASURES

#### 4.1 DESCRIPTION OF FIRST AID MEASURES

##### INGESTION:

Do not induce vomiting to avoid aspiration into the respiratory tracts. Obtain medical attention.

##### EYE CONTACT:

Rinse thoroughly with plenty of water for at least 10 minutes keeping eyelids open. Obtain medical attention if any pain or redness develops or persists.

##### SKIN CONTACT:

Remove contaminated clothes and shoes and rinse thoroughly with plenty of water and soap.

## **Product: TUTELA TRANSMISSION ZC 90**

### **INHALATION:**

Expose affected person to fresh air and obtain medical attention if necessary.

### **4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED**

Refer to section 11.

### **4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED**

Refer to section 4.1.

## **5. FIREFIGHTING MEASURES**

FLASH POINT: 220°C (ASTM D 92)

### **5.1 EXTINGUISHING MEDIA**

This product has no special fire risk. In case of fire use foam, carbon dioxide, dry chemical powder and water mist.

Avoid high pressure water jet. Use water jet only to cool down surfaces exposed to fire.

### **5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE**

Don't breathe combustion fumes: fire can form harmful compounds.

### **COMBUSTION PRODUCTS:**

Oxides of carbon, compounds of sulphur, phosphorus, nitrogen and products of incomplete combustion.

### **5.3 ADVICE FOR FIREFIGHTERS**

Protective clothing complete with autobreathing feature.

## **6. ACCIDENTAL RELEASE MEASURES**

### **6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES**



## **Product: TUTELA TRANSMISSION ZC 90**

Avoid contact with skin and eyes by wearing appropriate protective clothing.

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

### **6.2 ENVIRONMENTAL PRECAUTIONS**

Prevent the material from entering soil, sewers and water courses. Contact the appropriate authorities if necessary.

### **6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP**

In case of large spills dike and pump into suitable containers for disposal. Contain small spills with absorbent material. Put dirty material in suitable container. Dispose of dirty material in accordance with local or national regulations.

### **6.4 REFERENCE TO OTHER SECTIONS**

Refer to sections 8 and 13 for more information.

## **7. HANDLING AND STORAGE**

### **7.1 PRECAUTIONS FOR SAFE HANDLING**

Avoid frequent and prolonged skin contact and contact with eyes. Provide adequate ventilation to avoid mist or aerosol. Practice reasonable personal cleanliness.

Avoid the risk of sliding.

### **7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES**

Store under cover in the original container securely closed away from heat and sources of ignition. Do not store in the open air. Assure a correct ventilation of premises and the control of possible leak.

### **7.3 SPECIFIC END USE(S)**

Refer to the uses listed in Section 1.2.

## Product: TUTELA TRANSMISSION ZC 90

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### 8.1 CONTROL PARAMETERS

##### OCCUPATIONAL EXPOSURE LIMITS:

About monitoring procedures, refer to relevant national and European legislation.

The recommended exposure limits (ACGIH) are:

CHEMICAL AGENT		LIMIT
oil mists	TLV/TWA (8 h)	5 mg/m <sup>3</sup>
oil mists	TLV/STEL	10 mg/m <sup>3</sup>

#### 8.2 EXPOSURE CONTROLS

##### TECHNICAL PRECAUTIONS:

Avoid production and diffusion of mist and aerosol with utilization of localized ventilation/aspiration or other required precautions. If necessary, adopt all required precaution to avoid product immission in environment (e.g., blasting systems, catch basins, ...).

##### RESPIRATORY PROTECTION:

None required under normal conditions of use. Use approved full face respirator with organic vapour filter cartridge if the recommended exposure limits are exceeded.

##### HAND AND SKIN PROTECTION:

Wear suitable gloves in oil-proof material (i.e. neoprene, nitrile). Gloves should be changed when they show wear. The kind of gloves and the term of use must be decided from employer with regard to processing and to allow for legislation on personal protection equipment and glove producer's indications.

Wear gloves only with clean hands.

Wear suitable protective clothing (for further information, refer to CEN-EN 14605); change it immediately in case of large contamination and wash it before subsequent use.

Practice reasonable personal cleanliness.

##### EYE PROTECTION:

Chemical goggles and face shield in case of oil splashes.

## Product: TUTELA TRANSMISSION ZC 90

### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

CHEMICAL AND PHYSICAL PROPERTIES	VALUE	METHOD
APPEARANCE	Viscous liquid	
DENSITY 15°C	0.880 g/cm <sup>3</sup>	ASTM D 4052
WATER SOLUBILITY	Insoluble	
VISCOSITY @ 100°C	14.5 cSt	ASTM D 445
INITIAL BOILING POINT	>300°C	ASTM D 1120
FLASH POINT	220°C	ASTM D 92
ODOUR	Not determined	
ODOUR THRESHOLD	Not determined	
pH	Not applicable	
MELTING POINT/FREEZING POINT	Not determined	
EVAPORATION RATE	Not determined	
FLAMMABILITY (SOLID, GAS)	Not applicable	
UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS	Not determined	
VAPOUR PRESSURE	Not determined	
VAPOUR DENSITY	Not determined	
PARTITION COEFFICIENT: n-OCTANOL/WATER	Not determined	
AUTO-IGNITION TEMPERATURE	Not determined	
DECOMPOSITION TEMPERATURE	Not determined	
EXPLOSIVE PROPERTIES	None	
OXIDISING PROPERTIES	Not determined	

#### 9.2 OTHER INFORMATION

### 10. STABILITY AND REACTIVITY

#### 10.1 REACTIVITY

## **Product: TUTELA TRANSMISSION ZC 90**

Read carefully all information provided in other sections of heading 10.

### **10.2 CHEMICAL STABILITY**

The product is stable under normal conditions of use.

### **10.3 POSSIBILITY OF HAZARDOUS REACTIONS**

Not expected under normal conditions of use.

### **10.4 CONDITIONS TO AVOID**

This product must be kept far from heat sources. In any case, avoid exposing product to temperatures above the flash point.

### **10.5 INCOMPATIBLE MATERIALS**

Strong oxidizing agents, hard acids and bases.

### **10.6 HAZARDOUS DECOMPOSITION PRODUCTS**

Oxides of carbon, compounds of sulphur, phosphorus, nitrogen and hydrogen sulfide.

## **11. TOXICOLOGICAL INFORMATION**

### **11.1 INFORMATION ON TOXICOLOGICAL EFFECTS**

#### **INGESTION:**

Unlike to cause harm if accidentally swallowed in small doses, though ingestion of large quantities may cause gastro-intestinal effects.

#### **INHALATION:**

Inhalation of mists and vapours generated at elevated temperatures may cause respiratory irritation.

#### **EYE CONTACT:**

Contact may cause slight irritations.

#### **SKIN CONTACT:**





## **Product: TUTELA TRANSMISSION ZC 90**

Product is not an irritant, but prolonged or repeated contacts may cause irritations or dermatitis.

## **12. ECOLOGICAL INFORMATION**

### **12.1 TOXICITY**

This product is not classified dangerous for the environment.

One of product components is toxic to aquatic organisms and with long-term adverse effects in the aquatic environment.

### **12.2 PERSISTENCE AND DEGRADABILITY**

This product is not classified dangerous for the environment, but it is considered not readily biodegradable.

The product is not soluble in water. In case of large spills, it is a potential source of soil, watercourse and groundwater pollution.

### **12.3 BIOACCUMULATIVE POTENTIAL**

Not available.

### **12.4 MOBILITY IN SOIL**

Given its physical and chemical characteristics, the product generally shows weak tendency to evaporation, little mobility in the ground and it can be adsorbed from soil.

### **12.5 RESULTS OF PBT AND vPvB ASSESSMENT**

Not available.

### **12.6 OTHER ADVERSE EFFECTS**

No effect known.

## **13. DISPOSAL CONSIDERATIONS**



## **Product: TUTELA TRANSMISSION ZC 90**

### **13.1 WASTE TREATMENT METHODS**

Prevent contamination of soil, drains and surface waters.

Do not discharge in sewers, tunnels or water courses. Dispose in accordance with local or national regulations via authorised person/licensed waste disposal contractor.

The used product is to be considered a special waste to be classified in accordance to Directive 2008/98/EC on wastes and related legislation.

## **14. TRANSPORT INFORMATION**

Not classified as hazardous for transport (ADR/RID, ICAO/IATA, IMDG).

## **15. REGULATORY INFORMATION**

### **15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE**

Regulation (EC) No 1272/2008, with all National and European related legislations - on classification, labelling and packaging of substances and mixtures

Regulation (EC) No 790/2009 amending, for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

Directive 1999/45/EC and all following updates, together with its national realization, about classification, packaging and labelling of dangerous preparations

Regulation (EC) No 1907/2006, with all National and European related legislations - concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

Regulation (EU) No 453/2010 amending Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

## Product: TUTELA TRANSMISSION ZC 90

Directives 89/391/EC, 89/654/EC, 89/655/EC, 89/656/EC, 90/269/EC, 90/270/EC, 90/394/EC, 90/679/EC and all following updates, together with its national realization, about improvement of worker safety and health

Directives 98/24/EC and all following updates, together with its national realization, about protection of worker safety and health against chemical agent risks

Directive 1991/156/EC and all following updates, together with national waste legislation

EC directives and national environment protection legislation (air, water and soil)

### 15.2 CHEMICAL SAFETY ASSESSMENT

This product contains substances for which chemical safety assessments are not yet available.

## 16. OTHER INFORMATION

The mineral base oils contained in this product are severely refined and contain less than 3% DMSO extract according to IP 346 method, and are therefore not classified as carcinogen according to Regulation (EC) No 1272/2008, note L.

Sheet complies with the criteria of Annex I of Regulation (EU) No. 453/2010 as well as with Regulation (EC) No. 1272/2008 and Directive 99/45/EC and following adjustments.

This product must not be used in applications other than recommended without first seeking the advice of the Technical Department.

As regard as the previous version this sheet has been changed at following headings:

ALL - REGULATION (EC) No. 453/2010 ADJUSTMENT

Caption about heading 3, R-phrases and H-statements:

R 38 Irritating to skin.



## Product: TUTELA TRANSMISSION ZC 90

- |   |       |   |
|---|-------|---|
| R | 41    | Risk of serious damage to eyes.   |
| R | 51/53 | Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |

List of abbreviations used:

N.A. Not applicable

N.D. Not available

PBT: Persistent, Bioaccumulative and Toxic

vPvB: Very Persistent and very Bioaccumulative

DNEL: Derived No-Effect Levels

PNEC: Predicted No-Effect Concentration

This product must be stored, handled and used according to correct industrial hygienic practices and in compliance with laws in force.

The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be considered as any guarantee of specific properties.