

Product Name	:	Transmission TM 80W-90		Page: 1/4
Version	:	1	Date of issue :	2008/02/23.
MSDS No.	:	Not available.	Date of previous issue :	No Previous Validation.

Label Requirements

Risk phrases

: This product is not classified according to the EU regulations.

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

Product name	: Transmission TM 80W-90
Product code	:
Use of the substance/preparation	: Transmission fluid
Supplier	: TOTAL South Africa P.O. Box 579 Saxonwold 2132
Emergency telephone number	: +27 11 778 2000 +27 82 551 2753 0860 111 111 (SA Only)

2. Composition/information on ingredients

Substance

Chemical characterization : Petrochemical.

Ingredient name	CAS number	%	EC number	Classification
Base oils Olefin sulfide Phosphoric acid ester amine salt oleylamine See section 16 for the full text of the R Phrases declared above	112-90-3	>90 <4 <1 <0.5	204-015-5	Not classified. R52/53 N; R51/53 Xn; R22, C; R34, Xi; R43. R52/53

* Occupational Exposure Limit(s), if available, are listed in section 8

3. Hazards identification

The substance is not classified as dangerous according to Directive 67/548/EEC and its amendments.

Classification	:	Not classified.		
Physical/chemical hazards	:	No known significant effects or critical hazards.		
Human health hazards	:	Inhalation of oil mist or vapors at elevated temperatures may cause respiratory irritation.		
Environmental hazards	:	No known significant effects or critical hazards.		
See section 11 for more detailed information on health effects and symptoms.				

4. First aid measures

Inhalation	: If inhaled, remove to fresh air. Get medical attention if adverse health effects persist or are severe.
Ingestion	: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.
Skin contact	: Remove contaminated clothing and shoes. Wash contaminated skin with soap and water. Get medical attention if irritation develops.
Eye contact	: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops.
	:
	:

See section 11 for more detailed information on health effects and symptoms.



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5. Fire-fighting measure	25				
Extinguishing media	: In case of fire, use water spray (fog), foam, dry chemicals, or CO ₂ . Never direct a water jet in the container in order to prevent any splashing of the product which could cause spreading of the fire.				
Special exposure hazards	: No specific hazard.				
Hazardous thermal decomposition products	: These products are : carbon oxides (CO, CO ₂).				
Special protective equipment for fire- fighters	: Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full facepiece operated in positive pressure mode.				
Remark	: If fire can be controlled, cool container with water from unmanned hose holder or monitor nozzles until well after fire is out.				
6. Accidental release me	easures				
Personal precautions	: Use suitable protective equipment (Section 8).				
Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.				
Methods for cleaning up	: If emergency personnel are unavailable, contain spilled material. For small spills add absorbent (soil may be used in the absence of other suitable materials) scoop up material and place in a sealed, liquid-proof container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.				
7. Handling and storage	2				
Handling	: Wash thoroughly after handling.				
Storage	 Keep container tightly closed. Keep container in a cool, well-ventilated area. Combustible materials should be stored away from extreme heat and away from strong oxidizing agents. Outside or detached storage is preferred. 				
Packaging materials Recommended	: Use original container. Empty containers retain product residue and can be hazardous.				
8. Exposure controls/pe	rsonal protection				
Ingredient name	Occupational exposure limits				
oil mist, mineral	ACGIH TLV (United States, 9/2004). Notes: Adopted Values enclosed are those for which changes are proposed. Consult the Notice of Intended Changes for current proposal. See Notice of Intended changes. STEL: 10 mg/m ³ 15 minute(s). Form: All forms TWA: 5 mg/m ³ 8 hour(s). Form: All forms				
Occupational exposure controls	: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are proximal to the work-station location.				
Respiratory protection	: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.				
 Hand protection Chemical-resistant, impervious gloves or gauntlets complying with an approved standar should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Recommended: nitrile rubber, neoprene. 					
Eye protection	: Safety eyewear complying with an approved standard should be used when a risk				



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Skin protection		: Personal protective equipment for the body should be selected ba performed and the risks involved and should be approved by a sp this product.	6

9. Physical and chemical properties

General information

:	Liquid. (Clear viscous liquid.)
:	Brown.
:	Characteristic.
nme	ntal information
:	not available
:	Closed cup: >190°C (374°F).
:	0.897 (15°C / 59°F)
:	Easily soluble in n-octanol. Insoluble in cold water, hot water.
:	The product is more soluble in octanol; log(octanol/water) >6
:	14.8 mm2 / sec @ 100 C
	>250°C (482°F)
	: 1 me : : : :

10. Stability and reactivity

Stability	:	The product is stable.
Conditions to avoid	:	Avoid all possible sources of ignition (spark or flame). Avoid breathing vapors or spray mists.
Materials to avoid	:	Reactive with oxidizing agents.
Hazardous decomposition products	:	carbon oxides (CO, CO ₂)

11. Toxicological information

Potential acute health effects

Inhalation	: Inhalation of oil mist or vapors at elevated temperatures may cause respiratory irritation.
Ingestion	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Eye contact	: No known significant effects or critical hazards.
Potential chronic health effects	
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Reproductive toxicity	: No known significant effects or critical hazards.
Over-exposure signs/symptoms	
Inhalation	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Skin	: No known significant effects or critical hazards.
Target organs	Causes damage to the following organs: skin.
Other adverse effects	: Repeated exposure may cause skin oil blisters.



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12. Ecological information

Remarks

: Product is not hazardous to water. Not expected to bioaccumulate. Inherently biodegradable

13. Disposal considerations

Methods of disposal

: Non-hazardous waste Recycle, if possible.

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

14. Transport information

Regulatory information	UN number	Proper shipping name	Class	Packing group	Label	Additional information
ADR / SABS 0228 Class	Not regulated.	-	-	-		-
IMDG Class	Not regulated.	-	-	-		-
IATA Class	Not regulated.	-	-	-		-

15. Regulatory information

SABS 0263 / EU Regulations

Risk phrases	: This product is not classified according to the EU regulations.
Product use	 Classification and labeling have been performed according to EU directives 67/548/EEC, 1999/45/EC including amendments and the intended use. Industrial applications.

16. Other information

Full text of R phrases referred to in sections 2 and 3 - Europe	:	R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
		R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
		R38- Irritating to skin.
		R22- Harmful if swallowed.
		R34- Causes burns.
		R43- May cause sensitization by skin contact.
		R50- Very toxic to aquatic organisms.
		R53- May cause long-term adverse effects in the aquatic environment.
		R41- Risk of serious damage to eyes.
Prepared by	:	TOTAL South Africa Technical Department.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.