



SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

SDS # : 080004

BIOTRANS LS FE 75W-90

Date of the previous version: 2013-10-25

Revision Date: 2015-03-27

Version 2

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name	BIOTRANS LS FE 75W-90
Number	3P0
Substance/mixture	Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Transmission fluid.
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1.3. Details of the supplier of the safety data sheet

Supplier	TOTAL UK LIMITED One Euston Square 40 Melton Street. London. NW1 2FD UNITED KINGDOM Tel: +44 (0)20 7339 8000 Fax: +44 (0)20 7339 8033
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For further information, please contact:

Contact Point	Specific Product Related Info : 01977 636200
E-mail Address	rm.gb-msds@total.co.uk

1.4. Emergency telephone number

00 33 149 00 00 49 (24h/24, 7d/7)
TOTAL UK ltd: + 44 (0) 20 7339 8000
For Lubricants only: TOTAL Lubricants - +44 (0)1977 636200
For bitumen only: Total Bitumen +44 (0) 17 7272 9302

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture**REGULATION (EC) No 1272/2008** ***

*For the full text of the H-Statements mentioned in this Section, see Section 2.2. ****

Serious eye damage/eye irritation - **Category 2***** - (H319)***

Skin sensitization - **Category 1***** - (H317)***

Chronic aquatic toxicity - **Category 3***** - (H412)***



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DIRECTIVE 67/548/EEC or 1999/45/EC

For the full text of the R-phrases mentioned in this Section, see Section 16.

The substance/mixture is non-dangerous in accordance with Directive(s) 67/548/EEC with amendments and/or 1999/45/EC with amendments

Symbol(s)

Not classified

2.2. Label elements

Labelled according to **REGULATION (EC) No 1272/2008*****

Contains Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentoxide, and salted by amines, C12-14- tert-alkyl

Hazard pictograms

None

**Signal Word**

WARNING***

Hazard Statements ***

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation***

Precautionary statements

P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection

P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children***

2.3. Other hazards

Physical-Chemical Properties Contaminated surfaces will be extremely slippery.

Environmental properties Should not be released into the environment.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	EC-No	REACH Registration Number	CAS-No	Weight %	Classification (Dir. 67/548)	GHS Classification
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Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentoxide, and salted by amines, C12-14-tert-alkyl***	931-384-6	01-2119493620-38	^	<2	Xn;R22 Xi;R41 R43 N;R51-53	Acute Tox. 4 (H302) Aquatic Chronic 2 (H411) Eye Dam. 1 (H318) Flam. Liq. 3 (H226) Skin Sens. 1 (H317)***
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Additional information Product containing mineral oil with less than 3% DMSO extract as measured by IP 346.

For the full text of the R-phrases mentioned in this Section, see Section 16.
For the full text of the H-Statements mentioned in this Section, see Section 16.

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

General advice	IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.
Eye contact	Rinse thoroughly with plenty of water, also under the eyelids.
Skin contact	Take off contaminated clothing. Wash skin with soap and water. Wash contaminated clothing before reuse. High pressure jets may cause skin damage. Take victim immediately to hospital.***
Inhalation	Move to fresh air.
Ingestion	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or poison control centre immediately.

4.2. Most important symptoms and effects, both acute and delayed

Eye contact	Not classified.
Skin contact	Not classified. May produce an allergic reaction.
Inhalation	Not classified. Inhalation of vapours in high concentration may cause irritation of respiratory system.
Ingestion	Not classified. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician Treat symptomatically.

Section 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media Carbon dioxide (CO₂). ABC powder. Foam. Water spray or fog.



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Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Special hazard Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentration.

5.3. Precautions for fire-fighters

Special protective equipment for fire-fighters Wear self-contained breathing apparatus and protective suit.

Other information Cool containers / tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

General Information Do not touch or walk through spilled material. Contaminated surfaces will be extremely slippery. Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition.

6.2. Environmental precautions

General Information Do not allow material to contaminate ground water system. Try to prevent the material from entering drains or water courses. Local authorities should be advised if significant spillages cannot be contained.

6.3. Methods and materials for containment and cleaning up

Methods for cleaning up Dam up. Contain spillage, and then collect with non-combustable absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Keep in suitable, closed containers for disposal.

6.4. Reference to other sections

Personal protective equipment See Section 8 for more detail.

Waste treatment See section 13.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

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Advice on safe handling	When using, do not eat, drink or smoke. For personal protection see section 8. Use only in well-ventilated areas. Do not breathe vapours or spray mist. Avoid contact with skin, eyes and clothing.
Prevention of fire and explosion	Take precautionary measures against static discharges: Ground/bond containers, tanks and transfer/receiving equipment.
Hygiene measures	Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Do not use abrasives, solvents or fuels. Do not dry hands with rags that have been contaminated with product. Do not put product contaminated rags into workwear pockets.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions	Keep away from food, drink and animal feedingstuffs. Keep in a bonded area. Keep container tightly closed. Preferably keep in the original container. Otherwise, reproduce all the statutory information from the labels onto the new container. Do not remove the hazard labels of the containers (even if they are empty). Design the installations in order to avoid accidental emissions of product (due to seal breakage, for example) onto hot casings or electrical contacts. Protect from frost, heat and sunlight. Protect from moisture.
Materials to avoid	Strong oxidising agents.

7.3. Specific use(s)

Specific use(s) No information available.***

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parametres

Exposure limits Mineral oil mist:
 USA: OSHA (PEL) TWA 5 mg/m³, NIOSH (REL) TWA 5 mg/m³, STEL 10 mg/m³, ACGIH (TLV) TWA 5 mg/m³ (highly refined)***

Legend See section 16

DNEL Worker (Industrial/Professional)

Chemical Name	Short term, systemic effects	Short term, local effects	Long term, systemic effects	Long term, local effects
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14-tert-alkyl*** ^			12.5 mg/kg/8h (dermal) 8.56 mg/m ³ /8h (inhalation) (ECHA CHEM)	

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DNEL Consumer

Chemical Name	Short term, systemic effects	Short term, local effects	Long term, systemic effects	Long term, local effects
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14-tert-alkyl*** ^			6.25 mg/kg/24h (dermal) 2.2 mg/m ³ /24h (inhalation) 0.25 mg/kg/24h (oral) (ECHA CHEM)	

Predicted No Effect Concentration (PNEC)

Chemical Name	Water	Sediment	Soil	Air	STP	Oral
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14-tert-alkyl*** ^	0.0012 mg/l fw 0.00012 mg/l mw 0.064 mg/ or	3.13 mg/kg fw 0.313 mg/kg mw	2.54 mg/kg soil dw		24.33 mg/l	10 mg/kg food

8.2. Exposure controls

Occupational Exposure Controls

Engineering measures

Apply technical measures to comply with the occupational exposure limits. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

Personal protective equipment

General Information

If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers. These recommendations apply to the product as supplied.

Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Respirator with combination filter for vapour/particulate (EN 14387). Type A/P2. The use of breathing apparatus must comply strictly with the manufacturer's instructions and the regulations governing their choices and uses.***

Eye protection

If splashes are likely to occur, wear: Safety glasses with side-shields.

Skin and body protection

Wear suitable protective clothing. Protective shoes or boots. Long sleeved clothing.



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Hand protection

Hydrocarbon-proof gloves: Fluorinated rubber, Nitrile rubber. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves.

Environmental exposure controls**General Information**

The product should not be allowed to enter drains, water courses or the soil.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance		Clear	
Colour		brown	
Physical state @20°C		Liquid	
Odour		No information available	
Property	Values	Remarks	Method
pH		Not applicable	
Boiling point/boiling range		No information available	
Flash point	238 °C 460 °F		Cleveland Open Cup (COC) Cleveland Open Cup (COC)
Evaporation rate		No information available	
Flammability Limits in Air		No information available	
Vapour pressure		No information available	
Vapour density		No information available	
Density	960 kg/m ³		
Water solubility		Not applicable	
Solubility in other solvents		No information available	
logPow		No information available	
Autoignition temperature		No information available	
Viscosity, kinematic	13.7 - 14.3 mm ² /s	@ 100 °C	ASTM D445
Viscosity, dynamic	<= 190000 mPa s	@ -40 °C	BROOKFIELD L18A80
Explosive properties	Not explosive		
Oxidising properties	Not applicable		
Possibility of hazardous reactions	Not applicable		

9.2. Other information

No information available***

Section 10: STABILITY AND REACTIVITY



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10.1. Reactivity**General Information** No information available.10.2. Chemical stability**Stability** Stable under recommended storage conditions.10.3. Possibility of hazardous reactions**Hazardous reactions** None under normal processing.10.4. Conditions to Avoid**Conditions to Avoid** Heat (temperatures above flash point), sparks, ignition points, flames, static electricity.10.5. Incompatible materials**Materials to avoid** Strong oxidising agents.10.6. Hazardous Decomposition Products**Hazardous Decomposition Products** None under normal use.

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects**Acute toxicity Local effects Product Information****Skin contact** . Not classified. May produce an allergic reaction.**Eye contact** . Not classified.**Inhalation** . Not classified. Inhalation of vapours in high concentration may cause irritation of respiratory system.**Ingestion** . Not classified. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.**Acute toxicity - Component Information**

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentoxide, and salted by amines, C12-14-tert-alkyl***	LD50 2000 mg/kg bw (Rat - OECD TG 401)		-



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Sensitisation**Sensitisation**

Not classified as a sensitizer. Contains sensitizer(s). May produce an allergic reaction.

Specific effects**Carcinogenicity**

This product is not classified carcinogenic.

Mutagenicity

This product is not classified as mutagenic.

Reproductive toxicity

This product does not present any known or suspected reproductive hazards.

Repeated Dose Toxicity**Subchronic Toxicity**

No information available.

Target Organ Effects (STOT)**Target Organ Effects (STOT)**

No information available.

Other information**Other adverse effects**

Characteristic skin lesions (oil blisters) may develop following prolonged and repeated exposures (contact with contaminated clothing).

Section 12: ECOLOGICAL INFORMATION**12.1. Toxicity**

Not classified.

Acute aquatic toxicity - Product Information

No information available.

Acute aquatic toxicity - Component Information

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates.	Toxicity to fish	Toxicity to microorganisms
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14- tert-alkyl*** ^	EL50 (96h) > 15 mg (Selenastrum capricornutum - OECD 201) EC50 (96h) 6.4 mg/l (Pseudokirchnerella subcapitata - OECD 201) EC50 (96h) 15 mg/l (Pseudokirchnerella subcapitata - OECD 201) EC50 (96h) 6.4 mg/L (Selenastrum capricornutum- OECD TG 201) (ECHA CHEM)***	EL50 (48h) ca. 91.4 mg/l (Daphnia magna - OECD 202)***	LL50 (96h) ca. 24 mg/l (Oncorhynchus mykiss - OECD 203)***	

Chronic aquatic toxicity - Product Information

No information available.

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Chronic aquatic toxicity - Component Information

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates.	Toxicity to fish	Toxicity to microorganisms
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14- tert-alkyl*** ^	NOEC (96h) 1.7 mg/l (Pseudokirchnerella subcapitata - OECD 201) par NOEC (96h) 3.3 mg/l (Pseudokirchnerella subcapitata - OECD 201)***	EL50 (21d) 0.91 mg/l (Daphnia magna - OECD 211) NOEL (21d) 0.12 mg/l (Daphnia magna - OECD 211) EL50 (21d) 0.66 mg/l (Daphnia magna - OECD 211)***	-	EC50 (3h) ca. 2433 mg/L (Activated Sludge, domestic - OECD TG 209) (ECHA CHEM)

Effects on terrestrial organisms

No information available.

12.2. Persistence and Degradability

General Information

No information available.

12.3. Bioaccumulative potential

Product Information

No information available.

logPow

No information available

Component Information

Chemical Name	log Pow
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14- tert-alkyl*** - ^	< 0.30 to >7.10 (OECD TG 117) (ECHA CHEM)

12.4. Mobility in soil

Soil

Given its physical and chemical characteristics, the product generally shows low soil mobility.

Air

Loss by evaporation is limited.

Water

Insoluble. The product spreads on the surface of the water.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment

No information available.

12.6. Other adverse effects

General Information

No information available.



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Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues / unused products	Should not be released into the environment. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal.
EWC Waste Disposal No	The following Waste Codes are only suggestions: 13 02 05. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

Section 14: TRANSPORT INFORMATION

<u>ADR/RID</u>	not regulated
<u>IMDG/IMO</u>	not regulated
<u>ICAO/IATA</u>	not regulated
<u>ADN</u>	not regulated

Section 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

European Union

International Inventories **No information available*****

Further information

No information available***15.2. Chemical Safety Assessment**Chemical Safety Assessment** No information available15.3. National regulatory information



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The United Kingdom

- Avoid exceeding occupational exposure limits (see section 8).

Ireland

- Avoid exceeding occupational exposure limits (see section 8).

Section 16: OTHER INFORMATION**Full text of R-phrases referred to under sections 2 and 3**

R43 - May cause sensitisation by skin contact

R41 - Risk of serious damage to eyes

R22 - Harmful if swallowed

R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Full text of H-Statements referred to under sections 2 and 3

H302 - Harmful if swallowed

H411 - Toxic to aquatic life with long lasting effects

H319 - Causes serious eye irritation

H226 - Flammable liquid and vapour

H317 - May cause an allergic skin reaction***

Abbreviations, acronyms

Legend Section 8

TWA: Time Weight Average

STEL: Short Time Exposure Limit

+ Sensitiser

** Hazard Designation

M: Mutagen

*

C:

R:

Skin designation

Carcinogen

Toxic to reproduction

Revision Date: 2015-03-27**Revision Note** *** Indicates updated section.**This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006**

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 knowledge at the date indicated above. 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 activity. The user bears sole liability for the precautions required when using the product. The regulatory texts indicated herein are intended to aid the user to fulfil 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 Safety Data Sheet