



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

SDS # : 080084

DYNATRANS VX FE

Date of the previous version: 2015-04-15

Revision Date: 2016-03-30

Version 3

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

1.1. Product identifier

Product name	DYNATRANS VX FE
Number	4ZO
Substance/mixture	Mixture

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

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

Supplier	A - 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
	B - TOTAL LUBRIFIANTS 562 Avenue du Parc de L'île 92029 Nanterre Cedex FRANCE Tél: +33 (0)1 41 35 40 00 Fax: +33 (0)1 41 35 84 71

For further information, please contact:

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

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

UK: National Poisons Information Service (NPIS): NHS111 or a doctor

Version EUUK



SDS # : 080084

DYNATRANS VX FE

Revision Date: 2016-03-30

Version 3

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. ******Classification**

The product is not classified as dangerous according to Regulation (EC) No. 1272/2008***

2.2. Label elements

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

None***

Precautionary statements

None***

Supplemental Hazard Statements

EUH210 - Safety data sheet available on request***

EUH208 - Contains Benzenesulfonic acid, propenated, calcium salt, overbased **May produce an allergic reaction*****

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

3.2. Mixture*****Hazardous components *****

Chemical Name	EC-No	REACH Registration Number	CAS-No	Weight %	GHS Classification
Distillates (petroleum), hydrotreated heavy paraffinic***	265-157-1	01-2119484627-25	64742-54-7	30-<40	Asp. Tox. 1 (H304)
Distillates (petroleum), hydrotreated light paraffinic***	265-158-7	01-2119487077-29	64742-55-8	1-<3	Asp. Tox. 1 (H304)
Zinc alkyldithiophosphate***	272-028-3***	01-2119657973-23***	68649-42-3	1-<2.5	Eye Dam. 1 (H318) Aquatic Chronic 2 (H411)
Calcium long chain alkarylsulphonate***	-	-	722503-69-7	1-<2.5	Aquatic Chronic 4 (H413)

Version EUUK



SDS # : 080084

DYNATRANS VX FE

Revision Date: 2016-03-30

Version 3

Benzenesulfonic acid, propenated, calcium salt, overbased***	271-877-7	-	68610-84-4	1-<2.5	Skin Sens. 1 (H317) Aquatic Chronic 4 (H413)
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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 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	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Skin contact	Remove contaminated clothing and shoes. Wash off with soap and water. Wash contaminated clothing before reuse.
Inhalation	Inhalation of high concentrations of vapour or aerosols may cause irritation of the upper respiratory tract.
Ingestion	If swallowed, do not induce vomiting - seek medical advice.

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

Eye contact	Not classified. Contact with eyes may cause irritation. The supplier of some components contained within this formulation has indicated that the classification as irritant is not required.***
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.***

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	Foam. Carbon dioxide (CO ₂). ABC powder. Water spray.
Unsuitable Extinguishing Media	Do not use a solid water stream as it may scatter and spread fire.

Version EUUK



SDS # : 080084

DYNATRANS VX FE

Revision Date: 2016-03-30

Version 3

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.

6.2. Environmental precautions

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

6.3. Methods and materials for containment and cleaning up

Methods for cleaning up Keep in suitable, closed containers for disposal. Dam up. Soak up with inert absorbent material.

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

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.

Version EUUK

SDS # : 080084

DYNATRANS VX FE

Revision Date: 2016-03-30

Version 3

Hygiene measures

Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. Use personal protective equipment as required. Regular cleaning of equipment, work area and clothing is recommended. Wash hands with water as a precaution. 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 in a banded area. Do not remove the hazard labels of the containers (even if they are empty). Preferably keep in the original container. Otherwise, reproduce all the statutory information from the labels onto the new container. 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. Strong acids.

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
Distillates (petroleum), hydrotreated heavy paraffinic*** 64742-54-7				5.4 mg/m ³ /8h (aerosol - inhalation)
Distillates (petroleum), hydrotreated light paraffinic*** 64742-55-8				5.4 mg/m ³ /8h (aerosol - inhalation)
Benzenesulfonic acid, propanated, calcium salt, overbased*** 68610-84-4	668 mg/m ³ inhalation 100 mg/kg bw/day dermal		25.55 mg/m ³ inhalation 8.33 mg/kg bw/day dermal	

DNEL Consumer

Chemical Name	Short term, systemic effects	Short term, local effects	Long term, systemic effects	Long term, local effects
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Version EUUK

SDS # : 080084

DYNATRANS VX FE

Revision Date: 2016-03-30

Version 3

Distillates (petroleum), hydrotreated heavy paraffinic*** 64742-54-7				1.2 mg/m ³ /24h (aerosol - inhalation)
Distillates (petroleum), hydrotreated light paraffinic*** 64742-55-8				1.2 mg/m ³ /24h (aerosol - inhalation)
Benzenesulfonic acid, propenated, calcium salt, overbased*** 68610-84-4	267.2 mg/m ³ inhalation 50 mg/kg bw/day dermal 50 mg/kg bw/day oral		11.8 mg/m ³ inhalation 4.17 mg/kg bw/day dermal 1.7 mg/kg bw/day oral	

Predicted No Effect Concentration (PNEC)

Chemical Name	Water	Sediment	Soil	Air	STP	Oral
Benzenesulfonic acid, propenated, calcium salt, overbased*** 68610-84-4	1 mg/l fw 1 mg/l mw 10 mg/l or	43500 mg/kg dw fw 3480 mg/kg dw mw	8850 mg/kg dw		1000 mg/l	33.333 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/P1. 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. Long sleeved clothing. Extended and repeated contacts with skin can cause skin ailments which may be aggravated by minor injuries or contact with soiled clothing.

Hand protection

Hydrocarbon-proof gloves. Nitrile rubber. Fluorinated rubber. In case of prolonged contact with the product, it is recommended to wear gloves complying with EN 420 and EN 374 standards, protecting at least for 480 minutes and having a thickness of 0,38 mm at least. These values are indicative only. The level of protection is provided by the material of the glove, its technical characteristics, its resistance to the chemicals to be handled, the appropriateness of its use and its replacement frequency.***

Version EUUK



SDS # : 080084

DYNATRANS VX FE

Revision Date: 2016-03-30

Version 3

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		characteristic	
Odour Threshold		No information available	
Property	Values	Remarks	Method
pH		No information available***	
Melting point/range		No information available	
Boiling point/boiling range		No information available***	
Flash point ***	254*** °C*** 489*** °F***		Open cup Open cup
Evaporation rate		No information available***	
Flammability Limits in Air		No information available	
Vapour pressure		No information available***	
Vapour density		No information available***	
Relative density		No information available	
Density	852*** - *** 862*** kg/m ³	@ 15 °C	
Water solubility		Insoluble	
Solubility in other solvents		Soluble in many common organic solvents	
logPow		No information available***	
Autoignition temperature		No information available***	
Decomposition temperature		No information available	
Viscosity, kinematic ***	*** 42*** mm2/s	@ 40 °C ***	ISO 3104 ***
***	*** 7.45*** -*** 8.05***	@ 100 °C ***	ISO 3104 ***
	mm2/s		
Explosive properties	Not explosive		
Oxidising properties	Not applicable		
Possibility of hazardous reactions	Not applicable		

9.2. Other information**Freezing point** No information available**Section 10: STABILITY AND REACTIVITY****10.1. Reactivity**

Version EUUK



SDS # : 080084

DYNATRANS VX FE

Revision Date: 2016-03-30

Version 3

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. Strong acids.10.6. Hazardous Decomposition Products**Hazardous Decomposition Products** Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot.**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. Contact with eyes may cause irritation. The supplier of some components contained within this formulation has indicated that the classification as irritant is not required.*****Inhalation** . Not classified. Inhalation of vapours in high concentration may cause irritation of respiratory system.**Ingestion** . Not classified.*****ATEmix (oral)** 11,959.00*** mg/kg*****ATEmix (dermal)** 11,518.00*** mg/kg*****ATEmix (inhalation-dust/mist)** 12.60*** mg/l*****ATEmix (inhalation-vapour)** 805.60*** mg/l*****Acute toxicity - Component Information**

Version EUUK



SDS # : 080084

DYNATRANS VX FE

Revision Date: 2016-03-30

Version 3

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Distillates (petroleum), hydrotreated heavy paraffinic***	LD50 > 5000 mg/kg bw (rat - OECD 420)	LD50 > 5000 mg/kg bw (rabbit - OECD 402)	LC50 (4h) > 5 mg/l (aerosol) (rat - OECD 403)
Distillates (petroleum), hydrotreated light paraffinic***	LD50 > 5000 mg/kg bw (rat - OECD 420)	LD50 > 5000 mg/kg bw (rabbit - OECD 402)	LC50 (4h) > 5.53 mg/l (aerosol) (rat - OECD 403)
Zinc alkyldithiophosphate***	LD50 2900 mg/kg (Rat)	LD50 > 2000 mg/kg (Rabbit)	
Benzenesulfonic acid, propenated, calcium salt, overbased***	LD50 > 5000 mg/kg (Rat - OECD 423)	LD50 > 5000 mg/kg (Rat - OECD 402)	

Sensitisation**Sensitisation**

Contains sensitizer(s). May produce an allergic reaction. The supplier of one of the components contained within this formulation has indicated that they have data, which confirms that at the concentration used, no sensitisation classification is required.***

Specific effects
Carcinogenicity
Mutagenicity
Reproductive toxicity

This product is not classified carcinogenic.
 Contains no ingredient listed as a mutagen.
 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
Distillates (petroleum), hydrotreated heavy paraffinic*** 64742-54-7	EL50 (48h) > 100 mg/l (Pseudokirchnerella subcapitata - OECD 201)	EL50 (48h) > 10000 mg/l (Daphnia magna - OECD 202)	LL50 (96h) > 100 mg/l (Oncorhynchus mykiss - OECD 203)	

Version EUUK



SDS # : 080084

DYNATRANS VX FE

Revision Date: 2016-03-30

Version 3

Distillates (petroleum), hydrotreated light paraffinic*** 64742-55-8	EL50 (48h) > 100 mg (Pseudokirchneriella subcapitata - OECD 201)	EL50 (48h) > 10000 mg/l (Daphnia magna - OECD 202)	LL50 (96h) > 100 mg/l (Oncorhynchus mykiss - OECD 203)	
Zinc alkyldithiophosphate*** 68649-42-3	EC50 (72h) 2.2 mg/l	EC50 (48h) 1.2 mg/l (Daphnia magna)	LC50 (96h) 4.5 mg/l	
Benzenesulfonic acid, propenated, calcium salt, overbased*** 68610-84-4	LC50 (72h) 1000 mg/l (Pseudokirchneriella subcapitata - static)	EL50 (48h) > 1000 mg/l (Daphnia magna - static)	LC50 (96h) 100 mg/l (Oncorhynchus mykiss - semi static - OECD 203)	

Chronic aquatic toxicity - Product Information

No information available.

Chronic aquatic toxicity - Component Information

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates.	Toxicity to fish	Toxicity to microorganisms
Distillates (petroleum), hydrotreated heavy paraffinic*** 64742-54-7		NOEL (21d) 10 mg/l (Daphnia magna - QSAR Petrotox)	NOEL (14/28d) > 1000 mg/l (Oncorhynchus mykiss - QSAR Petrotox)	
Distillates (petroleum), hydrotreated light paraffinic*** 64742-55-8		NOEL (21d) 10 mg/l (Daphnia magna - OECD 211)	NOEL (14/21d) > 1000 mg/l (Oncorhynchus mykiss - QSAR Petrotox)	
Zinc alkyldithiophosphate*** 68649-42-3	NOEC 1.0 mg/l	NOEC (21d) 0.4 mg/l (Daphnia magna)	NOEC(28d) 1.8 mg/l	
Benzenesulfonic acid, propenated, calcium salt, overbased*** 68610-84-4		NOELR (48h) 1.8 mg/l (Daphnia magna - OECD 202)		

Effects on terrestrial organisms

No information available.

12.2. Persistence and Degradability**General Information**

No product level data available.

12.3. Bioaccumulative potential**Product Information**

No information available.

logPow

No information available***

Component Information

Chemical Name	log Pow
Distillates (petroleum), hydrotreated heavy paraffinic*** - 64742-54-7	-
Zinc alkyldithiophosphate*** - 68649-42-3	0.56

12.4. Mobility in soil

Version EUUK



SDS # : 080084

DYNATRANS VX FE

Revision Date: 2016-03-30

Version 3

Soil	Given its physical and chemical characteristics, the product has no soil mobility.
Air	Loss by evaporation is limited.
Water	The product is insoluble and floats on 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.

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues / unused products	Dispose of in accordance with the European Directives on waste and hazardous waste. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. After use, this oil must be sent to a licensed waste oil facility. Incorrect disposal of used oil poses a risk to the environment. Mixture with other waste types such as solvents, brake- and cooling liquids is forbidden.
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.
Other information	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

Version EUUK



SDS # : 080084

DYNATRANS VX FE

Revision Date: 2016-03-30

Version 3

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

European Union

Further information

No information available

15.2. Chemical Safety Assessment

Chemical Safety Assessment No information available

15.3. National regulatory information

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 H-Statements referred to under sections 2 and 3

H304 - May be fatal if swallowed and enters airways

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H411 - Toxic to aquatic life with long lasting effects

H413 - May cause long lasting harmful effects to aquatic life***

Version EUUK



SDS # : 080084

DYNATRANS VX FE

Revision Date: 2016-03-30

Version 3

Abbreviations, acronyms

ACGIH = American Conference of Governmental Industrial Hygienists

bw = body weight

bw/day = body weight/day

EC x = Effect Concentration associated with x% response

GLP = Good Laboratory Practice

IARC = International Agency for Research of Cancer

LC50 = 50% Lethal concentration - Concentration of a chemical in air or a chemical in water which causes the death of 50% (one half) of a group of test animals

LD50 = 50% Lethal Dose - Chemical amount, given at once, which causes the death of 50% (one half) of a group of test animals

LL = Lethal Loading

NIOSH = National Institute of Occupational Safety and Health

NOAEL = No Observed Adverse Effect Level

NOEC = No Observed Effect Concentration

NOEL = No Observed Effect Level

OECD = Organization for Economic Co-operation and Development

OSHA = Occupational Safety and Health Administration

UVCB = Substance of unknown or Variable composition, Complex reaction products or Biological material

DNEL = Derived No Effect Level

PNEC = Predicted No Effect Concentration

dw = dry weight

fw = fresh water

mw = marine water

or = occasional release

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: 2016-03-30**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

Version EUUK