



## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

SDS # : 31157

# MULTIS EP 2

Date of the previous version: 2016-11-21

Revision Date: 2016-11-29

Version 13.01

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING
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### 1.1. Product identifier

<b>Product name</b>	<b>MULTIS EP 2</b>
<b>Number</b>	626
<b>Substance/mixture</b>	Mixture

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

<b>Identified uses</b>	Lubricating grease.
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### 1.3. Details of the supplier of the safety data sheet

<b>Supplier</b>	<p style="color: red;">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</p> <p style="color: red;">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***</p>
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### For further information, please contact:

<b>Contact Point</b>	A - HSE
<b>E-mail Address</b>	<p style="color: red;">B - HSE***</p> <p style="color: red;">A - <a href="mailto:rm.gb-msds@total.co.uk">rm.gb-msds@total.co.uk</a></p> <p style="color: red;">B - <a href="mailto:rm.msds-lubs@total.com">rm.msds-lubs@total.com</a>***</p>

### 1.4. Emergency telephone number

Emergency telephone: +44 1235 239670  
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

Section 2: HAZARDS IDENTIFICATION
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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 classified as dangerous in accordance with Regulation (EC) No. 1272/2008  
 Chronic aquatic toxicity - Category 3 - (H412)

2.2. Label elements

Labelled according to REGULATION (EC) No 1272/2008

**Signal Word**

None

**Hazard Statements**

H412 - Harmful to aquatic life with long lasting effects

**Precautionary statements**

P501 - Dispose of contents/ container to an approved waste disposal plant

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
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu) esters, zinc salts	270-478-5	no data available	68442-22-8	1-<2.5	Eye Irrit. 2 (H319) Aquatic Chronic 2 (H411)
Fatty acids, vegetable-oil, Me esters, sulfurized	276-337-4	-	72102-30-8	1-<2.5	Aquatic Chronic 2 (H411)

**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

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4.1. Description of first aid measures

<b>General advice</b>	IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.
<b>Eye contact</b>	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes.
<b>Skin contact</b>	Remove contaminated clothing and shoes. Wash skin with soap and water. Wash contaminated clothing before reuse. High pressure jets may cause skin damage. Take victim immediately to hospital.
<b>Inhalation</b>	Move to fresh air.
<b>Ingestion</b>	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

<b>Eye contact</b>	Not classified.
<b>Skin contact</b>	Not classified. High pressure injection of the products under the skin may have very serious consequences even though no symptom or injury may be apparent.
<b>Inhalation</b>	Not classified. Inhalation of vapours in high concentration may cause irritation of respiratory system.
<b>Ingestion</b>	Not classified. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

4.3. Indication of any immediate medical attention and special treatment needed

<b>Notes to physician</b>	Treat symptomatically.
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Section 5: FIRE-FIGHTING MEASURES
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5.1. Extinguishing media

<b>Suitable extinguishing media</b>	Carbon dioxide (CO <sub>2</sub> ). ABC powder. Foam. Water spray or fog.
<b>Unsuitable Extinguishing Media</b>	Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

<b>Special hazard</b>	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.
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5.3. Precautions for fire-fighters

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**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. See Section 12 for additional Ecological Information.

#### 6.3. Methods and material for containment and cleaning up

**Methods for cleaning up** Dam up. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Collect free product with suitable mechanical means. 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

**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

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### Technical measures/Storage conditions

Keep away from food, drink and animal feedingstuffs. Keep in a bunded 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/m<sup>3</sup>, NIOSH (REL) TWA 5 mg/m<sup>3</sup>, STEL 10 mg/m<sup>3</sup>, ACGIH (TLV) TWA 5 mg/m<sup>3</sup> (highly refined)

#### Legend

See section 16

### 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

None under normal use conditions. 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. Protective shoes or boots. Long sleeved clothing.

###### Hand protection

Hydrocarbon-proof gloves: Fluorinated rubber, Nitrile 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

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glove, its technical characteristics, its resistance to the chemicals to be handled, the appropriateness of its use and its replacement frequency.

**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
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**9.1. Information on basic physical and chemical properties**

<b>Colour</b>		light brown to dark brown	
<b>Physical state @20°C</b>		solid	
<b>Odour</b>		characteristic	
<b>Odour Threshold</b>		No information available	
<b>Property</b>	<b>Values</b>	<b>Remarks</b>	<b>Method</b>
<b>pH</b>		Not applicable	
<b>Melting point/range</b>		Not applicable	
<b>Boiling point/boiling range</b>		No information available	
<b>Flash point</b>	> 200 °C > 392 °F		Cleveland Open Cup (COC) Cleveland Open Cup (COC)
<b>Evaporation rate</b>		Not applicable	
<b>Flammability Limits in Air</b>		No information available	
<b>Upper</b>		No information available	
<b>Lower</b>		No information available	
<b>Vapour pressure</b>		Not applicable	
<b>Vapour density</b>		Not applicable	
<b>Relative density</b>	0.87	@ 20 °C	
<b>Density</b>	870 kg/m <sup>3</sup>	@ 20 °C	
<b>Water solubility</b>		Insoluble	
<b>Solubility in other solvents</b>		No information available	
<b>logPow</b>		No information available	
<b>Autoignition temperature</b>		No information available	
<b>Decomposition temperature</b>		No information available	
<b>Viscosity, kinematic</b>		Not applicable	
<b>Explosive properties</b>	Not explosive		
<b>Oxidising properties</b>	Not applicable		
<b>Possibility of hazardous reactions</b>	No information available		

**9.2. Other information**

<b>Penetration index</b>	265 - 295 (1/10mm)	@ 25 °C	ASTM D 217
<b>Freezing point</b>		No information available	
<b>Drop point</b>	> 185 °C		ISO 2176

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## Section 10: STABILITY AND REACTIVITY

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. 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. High pressure injection of the products under the skin may have very serious consequences even though no symptom or injury may be apparent.

**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.

**ATEmix (inhalation-dust/mist)** 390.30 mg/l

**ATEmix (inhalation-vapour)** 1,538.20 mg/l

**Acute toxicity - Component Information**

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Fatty acids, vegetable-oil, Me esters, sulfurized	LD50 > 5000 mg/kg (Rat)		

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**Sensitisation****Sensitisation** Not classified as a sensitizer.**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)****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**

Harmful to aquatic life with long lasting effects.

**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
Fatty acids, vegetable-oil, Me esters, sulfurized 72102-30-8		EC50 (48h) 8.8 mg/l (Daphnia magna - Limit test)	LC50 (96h) > 8000 mg/l	

**Chronic aquatic toxicity - Product Information**

No information available.

**Chronic aquatic toxicity - Component Information****Effects on terrestrial organisms**

No information available.

**12.2. Persistence and Degradability**

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**General Information**

No information available.

12.3. Bioaccumulative potential**Product Information** No information available.**logPow** No information available**Component Information**

Chemical Name	log Pow
Fatty acids, vegetable-oil, Me esters, sulfurized - 72102-30-8	14

12.4. Mobility in soil**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** 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: 12 01 12. 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

ADR/RID not regulatedIMDG/IMO not regulated

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ICAO/IATA not regulatedADN not regulated**Section 15: REGULATORY INFORMATION****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**

H335 - May cause respiratory irritation

H315 - Causes skin irritation

H318 - Causes serious eye damage

H319 - Causes serious eye irritation

H411 - Toxic to aquatic life with long lasting effects

**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

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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: 2016-11-29

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