



## MATERIAL SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

SDS # : 32585

### VISGA 46

Date of the previous version: 2012-04-26

Revision Date: 2012-05-14

Version 3

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

##### 1.1. Product identifier

|                               |                 |
|-------------------------------|-----------------|
| <b>Product name</b>           | <b>VISGA 46</b> |
| <b>Number</b>                 | HJC             |
| <b>Pure substance/mixture</b> | Mixture         |

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

|                        |                |
|------------------------|----------------|
| <b>Identified uses</b> | Hydraulic oil. |
|------------------------|----------------|

##### 1.3. Details of the supplier of the safety data sheet

|                 |  |
|-----------------|--|
| <b>Supplier</b> | TOTAL LUBRIFIANTS<br>562 Avenue du Parc de L'île<br>92029 Nanterre Cedex<br>Tél: +33 (0)1 41 35 40 00<br>Fax: +33 (0)1 41 35 84 71 |
|-----------------|--|

##### For further information, please contact

|                       |                        |
|-----------------------|------------------------|
| <b>Contact Point</b>  | HSE                    |
| <b>E-mail Address</b> | rm.msds-lubs@total.com |

##### 1.4. Emergency telephone number

+33 1 49 00 00 49 (24h/24, 7d/7)  
 France - ORFILA (INRS) Tél : +33 (0)1 45 42 59 59  
 In France : - PARIS : Hôpital Fernand Widal 200, rue du Faubourg Saint-Denis 75475 Paris Cédex 10 , Tel : 01.40.05.48.48. -  
 MARSEILLE : Hopital Salvator, 249 bd Ste Marguerite 13274 Marseille cedex 5, Tel : 04.91.75.25.25. - LYON : Hopital Edouard  
 Herriot, 5 place d'Arsonvol, 69437 Lyon cedex 3, Tel : 04.72.11.69.11. - NANCY : Hopital central, 29 Av du Mal De Lattre de  
 Tassigny, 54000 Nancy, Tel : 03.83.32.36.36 ou le SAMU : Tel ( 15 )

#### 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.*

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

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



SDS # : 32585

## VISGA 46

Revision Date: 2012-05-14

Version 3

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:** Not classified/No labelling required

**R-phrase(s)**

none

**S-phrase(s)**

none

### 2.3. Other hazards

**Physical-Chemical Properties** Contaminated surfaces will be extremely slippery.

**Environmental properties** Should not be released into the environment.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2. Mixture

| Chemical Name   | EC-No     | REACH registration No: | CAS-No    | Weight % | Classification (Dir. 67/548) | Classification (Reg. 1272/2008)  |
|---|-----------|------------------------|-----------|----------|------------------------------|--|
| Zinc, bis[O,O-bis(2-ethylhexyl) phosphorodithioato-S,S']-, (T-4)- | 224-235-5 | 01-2119493635-27       | 4259-15-8 | <0.45    | Xi;R41;R51-53                | Aquatic Chronic 2 (H411)<br>Eye Dam. 1 (H318)                              |
| 2,6-di-tert-butylphenol   | 204-884-0 | no data available      | 128-39-2  | <0.2     | Xi;R38<br>N;R50-53           | Aquatic Acute 1 (H400)<br>Aquatic Chronic 1 (H410)<br>Skin Irrit. 2 (H315) |

**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.**



SDS # : 32585

**VISGA 46**

Revision Date: 2012-05-14

Version 3

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|-----------------------|
| 4. FIRST AID MEASURES |
|-----------------------|

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>    | Rinse thoroughly with plenty of water, also under the eyelids.  |
| <b>Skin contact</b>   | Remove contaminated clothing and shoes. Wash skin with soap and water. Wash contaminated clothing before reuse. |
| <b>Inhalation</b>     | Move to fresh air   |
| <b>Ingestion</b>      | Do NOT induce vomiting. Call a physician immediately.   |

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

|                     |  |
|---------------------|--|
| <b>Eye contact</b>  | Not classified.  |
| <b>Skin contact</b> | Not classified.  |
| <b>Inhalation</b>   | Not classified. Inhalation of vapors in high concentration may cause irritation of respiratory system. |
| <b>Ingestion</b>    | Not classified. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.        |

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

|                           |                       |
|---------------------------|-----------------------|
| <b>Notes to physician</b> | Treat symptomatically |
|---------------------------|-----------------------|

|                           |
|---------------------------|
| 5. FIRE-FIGHTING MEASURES |
|---------------------------|

5.1. Extinguishing media

|                                       |   |
|---------------------------------------|---|
| <b>Suitable Extinguishing Media</b>   | Use CO2, dry chemical, or foam. Water spray.                      |
| <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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SDS # : 32585

## VISGA 46

Revision Date: 2012-05-14

Version 3

### 5.3. Advice 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.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

**General Information** Ensure adequate ventilation. Remove all sources of ignition. Do not touch or walk through spilled material. Contaminated surfaces will be extremely slippery. For personal protection see section 8.

### 6.2. Environmental precautions

**General Information** Prevent entry into waterways, sewers, basements or confined areas. Do not allow material to contaminate ground water system. 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-combustible 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

## 7. HANDLING AND STORAGE

### 7.1. Precautions for safe handling

**Advice on safe handling** When using, do not eat, drink or smoke. Use only in well-ventilated areas. For personal protection see section 8. Do not breathe vapors or spray mist. Remove all sources of ignition. Avoid accidental spills and splashes (for example if a seal breaks) onto hot machine parts and electrical contacts.



SDS # : 32585

## VISGA 46

Revision Date: 2012-05-14

Version 3

### Hygiene measures

Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. Remove and wash contaminated clothing before re-use. Wash hands before breaks and at the end of workday. Provide regular cleaning of equipment, work area and clothing. Do not use abrasives, solvents or fuels. Use personal protective equipment as required. 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 container tightly closed. Keep in a banded area. Do not remove the hazard labels of the containers (even if they are empty). Keep preferably in the original container. Otherwise reproduce all indication of the regulation label on the new container. Protect from frost, heat and sunlight. Protect from moisture.

#### Materials to Avoid

Strong oxidizing agents.

### 7.3. Specific end uses

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

#### Exposure limits

oil mist : 10mg/m<sup>3</sup>, for 15 minutes; oil mist : 5mg/m<sup>3</sup>, for 8 hours.

#### 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.

##### Respiratory protection

None under normal use conditions



SDS # : 32585

**VISGA 46**

Revision Date: 2012-05-14

Version 3

|                                 |  |
|---------------------------------|--|
| <b>Eye Protection</b>           | If splashes are likely to occur, wear:. Safety glasses with side-shields.  |
| <b>Skin and body protection</b> | Wear suitable protective clothing. Protective gloves. Long sleeved clothing. Protective shoes or boots.  |
| <b>Hand Protection</b>          | Hydrocarbon-proof gloves. 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. 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

|  |
|--|
| <b>9. PHYSICAL AND CHEMICAL PROPERTIES</b> |
|--|

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

|                             |                |
|-----------------------------|----------------|
| <b>Appearance</b>           | limpid         |
| <b>Color</b>                | yellow         |
| <b>Physical State @20°C</b> | liquid         |
| <b>Odor</b>                 | Characteristic |

| <b>Property</b>                     | <b>Values</b>  | <b>Remarks</b>                          | <b>Method</b>   |
|-------------------------------------|--|---|---|
| <b>pH</b>                           |  | Not applicable                          |   |
| <b>Boiling point/boiling range</b>  |  | Not applicable                          |   |
| <b>Flash point</b>                  | <b>230 °C</b><br>428 °F                                |   | Cleveland Open Cup (COC)<br>Cleveland Open Cup (COC). |
| <b>Evaporation rate</b>             |  | No information available                |   |
| <b>Flammability Limits in Air</b>   |  | No information available                |   |
| <b>Vapor Pressure</b>               |  | No information available                |   |
| <b>Vapor density</b>                |  | No information available                |   |
| <b>Density</b>                      | 877 kg/m <sup>3</sup>                                  | @ 15 °C                                 |   |
| <b>Water solubility</b>             |  | Insoluble                               |   |
| <b>Solubility in other solvents</b> |  | Soluble in many common organic solvents |   |
| <b>logPow</b>                       |  | No information available                |   |
| <b>Autoignition temperature</b>     |  | No information available                |   |
| <b>Viscosity, kinematic</b>         | 46 - 50.6 mm <sup>2</sup> /s<br>8.4 mm <sup>2</sup> /s | @ 40 °C<br>@ 100 °C                     | ISO 3104<br>ISO 3104                                  |



SDS # : 32585

**VISGA 46**

Revision Date: 2012-05-14

Version 3

**Explosive properties** Not explosive  
**Oxidizing Properties** Not applicable  
**Possibility of hazardous reactions** Not applicable

9.2. Other information

**Pour point** <= -27 °C NF T 60-105

|                              |
|------------------------------|
| 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 oxidizing 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.

|                               |
|-------------------------------|
| 11. TOXICOLOGICAL INFORMATION |
|-------------------------------|

11.1. Information on toxicological effects

**Acute toxicity Local effects Product Information**



SDS # : 32585

**VISGA 46**

Revision Date: 2012-05-14

Version 3

|                     |  |
|---------------------|--|
| <b>Skin contact</b> | Not classified.  |
| <b>Eye contact</b>  | Not classified.  |
| <b>Inhalation</b>   | Not classified. Inhalation of vapors in high concentration may cause irritation of respiratory system. |
| <b>Ingestion</b>    | Not classified. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.        |

**Acute toxicity Component Information**

| Chemical Name  | LD50 Oral            | LD50 Dermal              | LC50 Inhalation |
|--|----------------------|--------------------------|-----------------|
| Zinc, bis[O,O-bis(2-ethylhexyl)phosphorodithioato-S,S']-, (T-4)- | = 3100 mg/kg ( Rat ) | > 5000 mg/kg ( Rabbit )  |                 |
| 2,6-di-tert-butylphenol  | > 5000 mg/kg ( Rat ) | = 10000 mg/kg ( Rabbit ) |                 |

**Sensitization**

**Sensitization** 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 contain 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 (pimples) may develop following prolonged and repeated exposures (contact with contaminated clothing).

**12. ECOLOGICAL INFORMATION**





SDS # : 32585

**VISGA 46**

Revision Date: 2012-05-14

Version 3

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 |
|---|--|---|---|----------------------------|
| Zinc, bis[O,O-bis(2-ethylhexyl) phosphorodithioato-S,S']-, (T-4)- 4259-15-8 | EC50 (96h) 1.0 - 5.0 mg/L<br>Pseudokirchneriella subcapitata | EC50 (48h) 1 - 1.5 mg/L<br>Daphnia magna            | LC50 (96h) 1.0-5.0 mg/L<br>Pimephales promelas (static) LC50 (96h) 10.0-35.0 mg/L Pimephales promelas (semi-static) |                            |
| 2,6-di-tert-butylphenol 128-39-2  |  | EC50 (48h) = 0.45 mg/L<br>Daphnia magna             |   |                            |

**Chronic aquatic toxicity Product Information**

No information available.

**Chronic aquatic toxicity Component Information**

No information available.

**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**

No information available.

| Chemical Name   | log Pow |
|---|---------|
| Zinc, bis[O,O-bis(2-ethylhexyl) phosphorodithioato-S,S']-, (T-4)- - 4259-15-8 | 3.6     |

12.4. Mobility in soil



SDS # : 32585

**VISGA 46**

Revision Date: 2012-05-14

Version 3

|              |   |
|--------------|---|
| <b>Soil</b>  | Given its physical and chemical characteristics, the product generally shows low soil mobility. |
| <b>Air</b>   | Loss by evaporation is limited.   |
| <b>Water</b> | 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.

|                                    |
|------------------------------------|
| <b>13. DISPOSAL CONSIDERATIONS</b> |
|------------------------------------|

13.1. Waste treatment methods

|  |  |
|--|--|
| <b>Waste from Residues / Unused Products</b> | 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.  |
| <b>Contaminated packaging</b>                | Empty containers should be taken to an approved waste handling site for recycling or disposal  |
| <b>EWC Waste Disposal No.</b>                | The following Waste Codes are only suggestions: 13 01 10. 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. |

|                                  |
|----------------------------------|
| <b>14. TRANSPORT INFORMATION</b> |
|----------------------------------|

|                  |               |
|------------------|---------------|
| <u>ADR/RID</u>   | Not regulated |
| <u>IMDG/IMO</u>  | Not regulated |
| <u>ICAO/IATA</u> | Not regulated |
| <u>ADN</u>       | Not regulated |



SDS # : 32585

**VISGA 46**

Revision Date: 2012-05-14

Version 3

|                            |
|----------------------------|
| 15. REGULATORY INFORMATION |
|----------------------------|

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

European Union

International Inventories

|                      |   |
|----------------------|---|
| <b>EINECS/ELINCS</b> | - |
| <b>TSCA</b>          | - |
| <b>DSL</b>           | - |
| <b>ENCS</b>          | - |
| <b>IECSC</b>         | - |
| <b>KECL</b>          | - |
| <b>PICCS</b>         | - |
| <b>AICS</b>          | - |
| <b>NZIoC</b>         | - |

**Legend****EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List**ENCS** - Japan Existing and New Chemical Substances**IECSC** - China Inventory of Existing Chemical Substances**KECL** - Korean Existing and Evaluated Chemical Substances**PICCS** - Philippines Inventory of Chemicals and Chemical Substances**AICS** - Australian Inventory of Chemical Substances**NZIoC** - New Zealand Inventory of Chemicals

Further information

### 15.2. Chemical Safety Assessment

**Chemical Safety Assessment**      No information available

|                       |
|-----------------------|
| 16. OTHER INFORMATION |
|-----------------------|

**Full text of R-phrases referred to under sections 2 and 3**

R41 - Risk of serious damage to eyes

R38 - Irritating to skin

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

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment



SDS # : 32585

## VISGA 46

Revision Date: 2012-05-14

Version 3

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

H318 - Causes serious eye damage  
 H315 - Causes skin irritation  
 H400 - Very toxic to aquatic life  
 H410 - Very toxic to aquatic life with long lasting effects  
 H411 - Toxic to aquatic life with long lasting effects

### Abbreviations, acronyms

#### Legend Section 8

|    |                    |    |                       |
|----|--------------------|----|-----------------------|
| +  | Sensitizer         | *  | Skin designation      |
| ** | Hazard Designation | C: | Carcinogen            |
| M: | Mutagen            | R: | Toxic to reproduction |

Revision Date: 2012-05-14

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 the safety data sheet