

# MATERIAL SAFETY DATA SHEET

(According to Regulation EC No 1907/2006 - REACH and Regulation EC No 1272/2008 - CLP)

## REPSOL SUPER TAURO PAG 1000.

| 1. PRODUCT IDENTIFICATION  |  |                                       |
|--|--|---------------------------------------|
| <b>Company:</b> REPSOL YPF Lubricantes y Especialidades, S.A.<br><br><b>Address:</b> Glorieta del Mar Caribe N°1. 28043 Madrid<br><br><b>Tel#</b> 34 913489400<br><br><b>Fax#</b> +34 913483610<br><b>e-mail address:</b> FDSRCPP@repsol.com | <b>Commercial name:</b> REPSOL SUPER TAURO PAG 1000. |                                       |
|  | <b>Chemical name:</b> NP.                            |                                       |
|  | <b>Synonyms:</b> Sliding/lubricant agent.            |                                       |
|  | <b>Molecular formula:</b> NP.                        | <b>CAS #:</b> NP                      |
|  | <b>EC (EINECS)#:</b> NP                              | <b>Annex I (Dir. 67/548/EEC)#:</b> NP |

| 2. HAZARDS IDENTIFICATION   |  |
|---|--|
| PHYSICAL / CHEMICAL   | TOXICITY (SYMPTOMS)  |
| In case of heating above 150°C or fire, it may emit toxics fumes. | <b>Inhalation:</b> Vapour inhalation at room temperature is unlikely because of its low viscosity. Repeated and prolonged exposures to high concentrations of vapours may cause respiratory tract irritation and pulmonary damage.<br><br><b>Ingestion/Aspiration:</b> Accidental intake of large amounts causes irritation of the gastrointestinal tract, nausea, vomiting and diarrhoea.<br><br><b>Contact skin/eyes:</b> Repeated and prolonged exposures produce smarting, redness, irritation and dermatitis due to defatting of the keratyn layer. No skin sensitization has been registered in animal tests. Hot liquid may cause burns. It may irritate eyes.<br><br><b>General toxic effects:</b> Skin irritation by contact with liquid product and by prolonged inhalation of fumes and aerosols. Hot liquid may cause burns. |

| 3. COMPOSITION   |         |                |           |
|--|---------|----------------|-----------|
| <b>General composition:</b> Additivated polyalkylene glycol. |         |                |           |
| Dangerous components   | Range % | Classification | S Phrases |
| NP   |         |                |           |

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#### 4. FIRST-AID MEASURES

**Inhalation:** Move the victim to fresh air. Administer oxygen if necessary. Call for medical attention.

**Ingestion/Aspiration:** DO NOT INDUCE VOMITING. Flush the mouth with water. Do not give anything by mouth to an unconscious or convulsing person. Call for urgent medical attention.

**Contact skin/eyes:** Flush with plenty of water and soap. In case of contact with eyes, flush with plenty of water during at least 15 minutes. Call for medical attention.

**General measures:** Call for medical attention.

#### 5. FIRE-FIGHTING MEASURES

**Extinguishing agents:** Foams, dry chemicals, CO<sub>2</sub>, water spray.

**Non suitable extinguishing agents:** Water applied directly may be ineffective due to product dispersion.

**Combustion products:** Complete combustion: CO<sub>2</sub> and H<sub>2</sub>O. Incomplete combustion: CO and other toxics fumes.

**Special measures:** Cool containers and surroundings with water spray.

**Special hazards:** NP

**Protective equipment:** Heat-resistant suit and gloves. Self-contained breathing apparatus.

#### 6. ACCIDENTAL RELEASE MEASURES

**Environmental precautions:** Keep the product away from drains, sewers and water sources.

**Personal precautions:** Keep unnecessary people away. Avoid prolonged contact with liquid product wearing suitable protective clothing.

**Cleanup methods:** Small spillages: Take up with dry sand or other non-combustible adsorbent material and place into containers for later recovery or disposal.

Large spillages: Dike far ahead of liquid spillage and pump with vacuum equipment into containers for later disposal.

**Personal protection:** Suitable protective clothing, gloves and goggles should be worn during the clean up operation.

## 7. HANDLING AND STORAGE

### Handling:

*General precautions:* Avoid inhalation of vapours or aerosols wearing breathing suitable protective clothing. Good local exhaust ventilation. Avoid contact with the product wearing suitable protective clothing, PVC gloves and safety goggles or visors to avoid splashes. Do not smoke, drink, or eat during handling.

*Specific conditions:* NP.

### Storage:

*Temperature and decomposition products:* The product may decompose above 150°C and emits CO, CO<sub>2</sub> and other toxics fumes.

*Dangerous reactions:* NP

*Storage conditions:* NP

*Incompatible materials:* Oxidants and reductor agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Personal protection:

*Eye protection:* Safety goggles to avoid splashes.

*Respiratory protection:* The product is slightly volatile at room temperature and does not present special risks. At high concentrations of vapours or aerosols, wear protective respiratory masks (combined filter AP-3).

*Skin protection:* PVC gloves, with thick above 1milimeter.

*Other protective equipment:* Showers and eye-washers in the working area.

**General precautions:** Avoid prolonged contact and inhalation of vapours and aerosols from the product. Local exhaust ventilation should be installed to capture and remove emissions near to the point of generation.

**Specific hygiene measures:** Care should be taken to ensure proper skin cleaning by washing thoroughly with soap and hot water, followed by the application of a skin re-conditioning cream. Do not use solvent-based skin cleaner.

**Exposure controls:** None established.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|   |  |
|---|--|
| <b>Appearance:</b> Liquid.                  | <b>pH:</b> NP                                      |
| <b>Colour:</b> Amber                        | <b>Odour:</b> Characteristic.                      |
| <b>Boiling point:</b> NP (decompose)        | <b>Melting/Freezing point:</b> NP                  |
| <b>Flash point:</b> > 240 °C                | <b>Autoignition temperature:</b> NP                |
| <b>Explosive properties:</b> NP             | <b>Oxidizing properties:</b> NP                    |
| <b>Vapour pressure:</b> NP                  | <b>Density:</b> 1.075 g/cm <sup>3</sup> at 20 °C   |
| <b>Surface tension:</b> NP                  | <b>Viscosity:</b> (40 °C) 1000 cSt (typical).      |
| <b>Vapour density:</b> NP                   | <b>Partition coefficient (n-octanol/water):</b> NP |
| <b>Water solubility:</b> Partially soluble. | <b>Solubility:</b> NP                              |
| <b>Other data:</b> Fire point: >370 °C      |  |

## 10. STABILITY AND REACTIVITY

|   |  |
|---|--|
| <b>Stability:</b> Stable at room temperature.   | <b>Conditions to avoid:</b> Exposure to open flames. |
| <b>Materials to avoid:</b> Strong acids, oxidants agents and reductor agents.   |  |
| <b>Hazardous decomposition/combustion products:</b> The product may decompose above 150°C and emits CO, CO <sub>2</sub> and other toxics fumes. |  |
| <b>Polymerization risk:</b> NP  | <b>Conditions to avoid:</b> NP                       |

## 11. TOXICOLOGICAL INFORMATION

|   |
|---|
| <b>Routes of exposure:</b> Contact with skin, eyes and inhalation. Ingestion is not frequent.   |
| <b>Acute and chronic effects:</b> Irritation by contact with liquid product and by prolonged inhalation of vapours or aerosols. Hot liquid may cause burns. |
| <b>Carcinogenicity:</b> NP  |
| <b>Reproductive toxicity:</b> No evidences.   |
| <b>Medical conditions which increase hazard to exposure:</b> Dermatological problems.   |

## 12. ECOLOGICAL INFORMATION

### Pollutant potential:

*Persistence and degradability:* There are not specific dates on the product although their components may cause long-term adverse effects in the aquatic environment.

*Mobility/bioaccumulative potential:* There are no specific dates on the product.

**Ecotoxicological effects:** Dangerous for aquatic life in high concentrations (spillages).

## 13. DISPOSAL CONSIDERATIONS

**Disposal methods (surplus):** Recycling and recovery of base oils when possible.

**Waste:** Liquids and solids from industrial process; do not attempt to clean containers since residue is difficult to remove; dispose in a safe way.

*Disposal:* Only in specific prepared and controlled areas. Avoid releasing waste oils to sewers.

*Handling:* Labelled and sealed containers. Avoid direct contact with waste oils.

*Provisions:* Companies which recover, dispose, store, transport or handle waste should comply with Dir. 2008/98/EC on waste, or other local, national or community provisions.

## 14. TRANSPORT INFORMATION

**Special precautions:** Stable at room temperature and during transport.

### Additional information:

UN Number: NP

ADR/RID: Not classified

Hazard identification number: NP

IATA-DGR: Not classified

Proper shipping name: NP

IMDG: Not classified

## 15. REGULATORY INFORMATION

**CLASSIFICATION**  
NP

**LABELLING**

**Symbols:** NP

**Phrases R**  
NP

**Phrases S**  
NP

**Other regulations:** NP

## 16. OTHER INFORMATION

### Data Bases consulted

EINECS: European Inventory of Existing Commercial Substances.  
TSCA: Toxic Substances Control Act, US Environmental Protection Agency  
HSDB: US National Library of Medicine.  
RTECS: US Dept. of Health & Human Services

**R phrases/Hazard Class-and-Category shown in the document:**  
NP

### Legislation consulted

Globally Harmonized System of Classification and Labelling of Chemicals (GHS).  
Regulation (EC) no 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (CLP).  
Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).  
Dir. 67/548/EEC about classification, labelling and packaging of dangerous substances (including amendments and adaptations in force).  
Dir. 1999/45/EC about classification, labelling and packaging of dangerous preparations (including amendments and adaptations in force).  
Dir. 91/689/EEC dangerous waste; Dir. 2008/98/EG waste management.  
Royal Decree 363/95: Regulation about notification of new substances and classification, packaging and labelling of dangerous substances.  
Royal Decree 255/2003: Regulation about classification, packaging and labelling of dangerous preparations.  
European Agreement concerning the international carriage of dangerous goods by road (ADR).  
Regulation on the international transport of dangerous goods on the railway. (RID)  
International maritime code of dangerous goods. (IMDG)  
International Air Transport Association (IATA) regulation pertaining to air shipment.

### Glossary

CAS: Chemical Abstract Service  
IARC: International Agency for Research on Cancer  
ACGIH: American Conference of Governmental Industrial Hygienists.  
TLV: Threshold Limit Value  
TWA: Time Weighted Average  
STEL: Short-term Exposure Level  
REL: Recommendable Exposure Limit  
PEL: Permissible Exposure Limit  
INSHT: Instituto Nal. de Seguridad e Higiene en el Trabajo

VLA-ED: Valor Límite Ambiental – Exposición Diaria  
VLA-EC: Valor Límite Ambiental – Exposición Corta  
LD<sub>50</sub>: Lethal Dose Medium  
LC<sub>50</sub>: Lethal Concentration Medium  
EC<sub>50</sub>: Effective Concentration Medium  
IC<sub>50</sub>: Inhibitory Concentration Medium  
BOD: Biological Oxygen Demand.  
NP: Not Pertinent  
| : Changes from the last revision

The information given in this document has been compiled based on the best existing information sources, latest available knowledge and according to the current requirements on classification, packaging and labelling of hazardous substances. It does not imply the information is exhaustive or accurate in all cases. It is the user's responsibility to determine the validity of the information contained in this Material Safety Data Sheet to apply depending on the case.