



## 1. Identification of the substance/preparation and company/undertaking

### 1.1 Identification of the substance or preparation

**Product name** Energol GR 3000-2

**SDS no.** 401721

**1.2 Use of the substance/preparation** Gear lubricant  
For specific application advice see appropriate Technical Data Sheet or consult our company representative.

### 1.3 Company/undertaking identification

**Supplier** BP Petrolleri A.Ş.  
Sarı Kanarya Sokak No:14 K2 Plaza  
34742 Kozyatağı, İstanbul  
TURKEY

Telephone: 0216 5712800  
Fax: 0216 5712950

**E-mail address** MSDSAdvice@bp.com

### 1.4 Emergency telephone number

**EMERGENCY TELEPHONE NUMBER** BP Access Line: 0 212 473 27 27  
Carechem: +44 (0) 1235 239 670 (24 hours)

## 2. Composition/information on ingredients

### Substance/preparation

Asphalt Naphtha Highly refined base oil (IP 346 DMSO extract < 3%). Proprietary performance additives.

| Chemical name                               | CAS no.    | %       | EINECS / ELINCS. | Classification  |
|---|------------|---------|------------------|---|
| Solvent naphtha (petroleum), heavy aromatic | 64742-94-5 | 10 - 20 | 265-198-5        | Xn; R65<br>R66, R67<br>N; R51/53<br>[1]                 |
| 1,2,4-Trimethylbenzene                      | 95-63-6    | 1 - 5   | 202-436-9        | R10<br>Xn; R20<br>Xi; R36/37/38<br>N; R51/53<br>[1] [2] |
| Mesitylene                                  | 108-67-8   | 0.1 - 1 | 203-604-4        | R10<br>Xi; R37<br>N; R51/53<br>[1] [2]                  |

See section 16 for the full text of the R-phrases declared above

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] PBT-substance

[4] vPvB-substance

Occupational exposure limits, if available, are listed in section 8.

## 3. Hazards identification

This preparation is classified as dangerous according to Directive 1999/45/EC as amended and adapted.

**Environmental hazards** Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

See sections 11 and 12 for more detailed information on health effects and symptoms and environmental hazards.

## 4. First-aid measures

**Eye contact** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.

**Skin contact** Immediately wash exposed skin with soap and water. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if irritation develops.

**Inhalation** If inhaled, remove to fresh air. Get medical attention if symptoms appear.

Conforms to the regulation on preparation and distribution of safety data sheets on hazardous materials and preparations 26.12.2008 – 27092.

|                                   |                   |                            |             |                 |  |
|-----------------------------------|-------------------|----------------------------|-------------|-----------------|--|
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|                           |  |
|---------------------------|--|
| <b>Ingestion</b>          | Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If potentially dangerous quantities of this material have been swallowed, call a physician immediately. |
| <b>Notes to physician</b> | Treatment should in general be symptomatic and directed to relieving any effects.  |

## 5 . Fire-fighting measures

### Extinguishing media

|   |  |
|---|--|
| <b>Suitable</b>                         | In case of fire, use foam, dry chemical or carbon dioxide extinguisher or spray.                             |
| <b>Not suitable</b>                     | Do not use water jet.  |
| <b>Hazardous decomposition products</b> | Decomposition products may include the following materials:<br>carbon dioxide<br>carbon monoxide             |
| <b>Unusual fire/explosion hazards</b>   | This material is not explosive as defined by established regulatory criteria.                                |
| <b>Special fire-fighting procedures</b> | None identified.   |
| <b>Protection of fire-fighters</b>      | Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear. |

## 6 . Accidental release measures


|                                  |   |
|----------------------------------|---|
| <b>Personal precautions</b>      |  No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).   |
| <b>Environmental precautions</b> |  Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material.   |
| <b>Large spill</b>               |  Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see section 1 for emergency contact information and section 13 for waste disposal. |
| <b>Small spill</b>               | Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.   |

## 7 . Handling and storage

|                          |   |
|--------------------------|---|
| <b>7.1 Handling</b>      | Wash thoroughly after handling.   |
| <b>7.2 Storage</b>       | Keep container tightly closed. Keep container in a cool, well-ventilated area.                              |
| <b>Not suitable</b>      | Prolonged exposure to elevated temperature.   |
| <b>7.3 Specific uses</b> | For specific application advice see appropriate Technical Data Sheet or consult our company representative. |

## 8 . Exposure controls/personal protection

### 8.1 Occupational exposure limits

**Ingredient name**  
2,4-Trimethylbenzene

Mesitylene

#### ACGIH TLVs

Asphalt

Base oil - unspecified

1,2,4-Trimethylbenzene

#### Occupational exposure limits

##### TR ISGGM OEL (Turkey).

TWA: 100 mg/m<sup>3</sup> 8 hour(s). Issued/Revised: 12/2003

TWA: 20 ppm 8 hour(s). Issued/Revised: 12/2003

##### TR ISGGM OEL (Turkey).

TWA: 100 mg/m<sup>3</sup> 8 hour(s). Issued/Revised: 12/2003

TWA: 20 ppm 8 hour(s). Issued/Revised: 12/2003

##### ACGIH TLV (United States).

TWA: 0.5 mg/m<sup>3</sup> 8 hour(s). Issued/Revised: 3/2000 Form: Fume

##### ACGIH (United States).

STEL: 10 mg/m<sup>3</sup> 15 minute(s). Form: Mineral oil, mist

TWA: 5 mg/m<sup>3</sup> 8 hour(s). Form: Mineral oil, mist

##### ACGIH TLV (United States).

TWA: 123 mg/m<sup>3</sup> 8 hour(s). Issued/Revised: 9/1994

TWA: 25 ppm 8 hour(s). Issued/Revised: 9/1994

For information and guidance, the ACGIH values are included. For further information on these please consult your supplier.

Whilst specific OELs for certain components may be shown in this section, other components may be present in any mist, vapour or dust produced. Therefore, the specific OELs may not be applicable to the product as a whole and are provided for guidance only.

Conforms to the regulation on preparation and distribution of safety data sheets on hazardous materials and preparations 26.12.2008 – 27092.

|                                   |                   |                            |             |                 |                         |
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|                                   |                   |                            |             |                 | <b>( ENGLISH )</b>      |

## 8.2 Exposure controls

### 8.2.1 Occupational exposure controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective occupational exposure limits.

All chemicals should be assessed for their risks to health and appropriate control measures put in place to prevent or adequately control exposure. A hierarchy of control measures exists (e.g. elimination, substitution, general ventilation, containment, systems of work, changing the process or activity) that must be considered before use of personal protective equipment. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained.

Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards.

The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

#### Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

#### 8.2.1.1 Respiratory protection

Respiratory protective equipment is not normally required where there is adequate natural or local exhaust ventilation to control exposure.

In case of insufficient ventilation, wear suitable respiratory equipment.

Respiratory protective equipment must be checked to ensure it fits correctly each time it is worn.

Air-filtering respirators, also called air-purifying respirators, will not be adequate under conditions of oxygen deficiency (i.e. low oxygen concentration), and would not be considered suitable where airborne concentrations of chemicals with a significant hazard are present. In these cases air-supplied breathing apparatus will be required.

Provided an air-filtering/air-purifying respirator is suitable, a filter for particulates can be used for mist or fume. Use filter type P or comparable standard. A combination filter for particles and organic gases and vapours (boiling point >65°C) may be required if vapour or abnormal odour is also present due to high product temperature. Use filter type AP or comparable standard.

#### 8.2.1.2 Hand protection

Wear protective gloves if prolonged or repeated contact is likely. Wear chemical resistant gloves.

Recommended: nitrile gloves

Protective gloves will deteriorate over time due to physical and chemical damage. Inspect and replace gloves on a regular basis. The frequency of replacement will depend upon the circumstances of use.

#### 8.2.1.3 Eye protection

Safety glasses with side shields.

#### 8.2.1.4 Skin protection

Use of protective clothing is good industrial practice.

Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required.

### 8.2.2 Environmental exposure controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective occupational exposure limits.

All chemicals should be assessed for their risks to health and appropriate control measures put in place to prevent or adequately control exposure. A hierarchy of control measures exists (e.g. elimination, substitution, general ventilation, containment, systems of work, changing the process or activity) that must be considered before use of personal protective equipment. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained.

Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards.

The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

## 9. Physical and chemical properties

### 9.1 General information

#### 9.1.1 Appearance

Physical state Liquid.

Colour Black.

#### 9.1.2 Odour

Hydrocarbon.

### 9.2 Important health, safety and environmental information

Flash point Open cup: >80°C (>176°F) [Cleveland.]

Viscosity Kinematic: 5000 mm<sup>2</sup>/s (5000 cSt) at 40°C

Kinematic: 150 mm<sup>2</sup>/s (150 cSt) at 100°C

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|                                |   |
|--------------------------------|---|
| Penetration Number (0.1 mm)    | 405 to 445 at 20°C                                      |
| Pour point                     | 6 °C  |
| Density                        | 980 kg/m <sup>3</sup> (0.98 g/cm <sup>3</sup> ) at 15°C |
| Solubility                     | insoluble in water.                                     |
| Partition coefficient (LogKow) | >3  |

9.3 Other information Not available.


## 10 . Stability and reactivity

|                                       |   |
|---------------------------------------|---|
| Stability                             | The product is stable.  |
| 10.1 Conditions to avoid              | No specific data.   |
| Possibility of hazardous reactions    | Under normal conditions of storage and use, hazardous reactions will not occur.   |
| 10.2 Materials to avoid               | Reactive or incompatible with the following materials: oxidizing materials.   |
| 10.3 Hazardous decomposition products | Combustion products may include the following:<br>carbon oxides<br><br>Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

## 11 . Toxicological information

|                      |  |
|----------------------|--|
| Acute toxicity       | Unlikely to cause more than transient stinging or redness if accidental eye contact occurs.<br><br>Unlikely to cause harm to the skin on brief or occasional contact but prolonged or repeated exposure may lead to dermatitis.<br><br>Unlikely to cause harm if accidentally swallowed in small doses, though larger quantities may cause nausea and diarrhoea.<br><br>At normal ambient temperatures this product will be unlikely to present an inhalation hazard because of its low volatility. May be harmful by inhalation if exposure to vapour, mists or fumes resulting from thermal decomposition products occurs. |
| Chronic toxicity     |  |
| Chronic effects      | Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.   |
| Effects and symptoms |  |
| Eyes                 | No significant health hazards identified.  |
| Skin                 | Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis.   |
| Inhalation           | No significant health hazards identified.  |
| Ingestion            | No significant health hazards identified.  |

## 12 . Ecological information

|                                   |   |
|-----------------------------------|---|
| 12.1 Ecotoxicity                  |   |
| Environmental hazards             |  Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| 12.2 Mobility                     | This product is unlikely to disperse in water.  |
| 12.3 Persistence/degradability    | Inherently biodegradable  |
| 12.4 Bioaccumulative potential    | This product is not expected to bioaccumulate through food chains in the environment.   |
| 12.5 Other ecological information | Spillages are unlikely to penetrate the soil.   |

## 13 . Disposal considerations

|   |  |
|---|--|
| Disposal considerations / Waste information | The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.<br><br><b>Refer to all national, regional, and local regulations for disposal requirements</b> |
|---|--|

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14 . Transport information

Not classified as hazardous for transport (ADR/RID, ADNR, IMDG, ICAO/IATA)

15 . Regulatory information

Classification and labelling have been performed according to EU directive 1999/45/EC as amended and adapted and Regulation on classification, packaging and labelling of Hazardous materials and preparations (26.12.2008-27092).

Label requirements

|                                   |   |
|-----------------------------------|---|
| Risk phrases                      | R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| Safety phrases                    | S61- Avoid release to the environment. Refer to special instructions/safety data sheet.               |
| Other regulations                 |   |
| Europe inventory                  | All components are listed or exempted.  |
| United States inventory (TSCA 8b) | All components are listed or exempted.  |
| Australia inventory (AICS)        | All components are listed or exempted.  |
| Canada inventory                  | All components are listed or exempted.  |
| China inventory (IECSC)           | All components are listed or exempted.  |
| Japan inventory (ENCS)            | At least one component is not listed.   |
| Korea inventory (KECI)            | All components are listed or exempted.  |
| Philippines inventory (PICCS)     | All components are listed or exempted.  |

16 . Other information

|  |  |
|--|--|
| Full text of R-phrases referred to in sections 2 and 3 | R10- Flammable.<br>R20- Harmful by inhalation.<br>R65- Harmful: may cause lung damage if swallowed.<br>R37- Irritating to respiratory system.<br>R36/37/38- Irritating to eyes, respiratory system and skin.<br>R66- Repeated exposure may cause skin dryness or cracking.<br>R67- Vapours may cause drowsiness and dizziness.<br>R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.<br>R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| History  |  |
| Date of issue/ Date of revision                        | 25/01/2010.  |
| Date of previous issue                                 | 01/12/2009.  |
| Prepared by  | Product Stewardship  |
| Notice to reader                                       | Indicates information that has changed from previously issued version.   |

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from us.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken.

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