# SAFETY DATA SHEET
# GRAVIS M 1500

According to Regulation (EC) No 1907/2006, Annex II, as amended by Regulation (EU) No 453/2010

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

**Product name** GRAVIS M 1500

**Product number** 28161

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

**Identified uses** Industrial oil

**Uses advised against** Use only for intended applications.

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

**Supplier** PETROL OFİSİ A.Ş.
Ünalan Mahallesi, Libadiye Caddesi No: 82F Kat: 2-3-4, 34700 Üsküdar/ Istanbul
Tel: +90 850 339 1919
Fax: +90 216 275 3854
madeniyag@petrolofisi.com.tr

**Contact person** Customer Services: madeniyag@petrolofisi.com.tr

### 1.4. Emergency telephone number

**Emergency telephone** Madeni Yağ Customer Services: 0850 339 1919 (working hours)

**National emergency telephone number** Emergency Medical Services: 112 National Poison Consultance Center: 114

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

**Classification (EC 1272/2008)**

**Physical hazards** Not Classified

**Health hazards** Skin Sens. 1 - H317

**Environmental hazards** Aquatic Chronic 3 - H412

### 2.2. Label elements

**Hazard pictograms**

**Signal word** Warning

**Hazard statements** H317 May cause an allergic skin reaction.
H412 Harmful to aquatic life with long lasting effects.

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**Precautionary statements**

P261 Avoid breathing vapour/ spray.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P302+P352 IF ON SKIN: Wash with plenty of water.
P321 Specific treatment (see medical advice on this label).
P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P501 Dispose of contents/ container in accordance with national regulations.

**Contains** Amines, C10-14-tert-alkyl

### 2.3. Other hazards

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

**Mineral oil (mixture)** **1-5%**

CAS number: —

The mineral oil contained in this material may be described by one or more of the following CAS No's.: 64742-54-7, 64742-65-0, 6474255-8, and 64742-56-9.

**Classification**
Asp. Tox. 1 - H304

**Distilatlar (petrol), hidrojen ile işlenmiş hafif naftenik** **1-5%**

CAS number: — EC number: 265-156-6

**Classification**
Asp. Tox. 1 - H304

**Phosphoric acid, mono- and bis(branched and linear pentyl) esters** **<1%**

CAS number: — EC number: 282-784-6

**Classification**
Skin Corr. 1B - H314
Eye Dam. 1 - H318
Aquatic Chronic 3 - H412

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| **Amines, C10-14-tert-alkyl** | | **<1%** |
|---|---|---|
| CAS number: — | EC number: 701-175-2 | |
| M factor (Acute) = 1 | M factor (Chronic) = 1 | |

**Classification**
Acute Tox. 4 - H302
Acute Tox. 3 - H311
Acute Tox. 2 - H330
Skin Corr. 1B - H314
Eye Dam. 1 - H318
Skin Sens. 1A - H317
STOT SE 3 - H335
Aquatic Acute 1 - H400
Aquatic Chronic 1 - H410

| **1,3,4–Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-nonanethiol** | | **<1%** |
|---|---|---|
| CAS number: — | EC number: 293-927-7 | |

**Classification**
Aquatic Chronic 3 - H412

| **C16-18-(even numbered, saturated and unsaturated)-alkylamines** | | **<1%** |
|---|---|---|
| CAS number: — | EC number: 627-034-4 | |
| M factor (Acute) = 10 | M factor (Chronic) = 10 | |

**Classification**
Acute Tox. 4 - H302
Skin Corr. 1B - H314
Eye Dam. 1 - H318
STOT SE 3 - H335
STOT RE 2 - H373
Asp. Tox. 1 - H304
Aquatic Acute 1 - H400
Aquatic Chronic 1 - H410

The full text for all hazard statements is displayed in Section 16.

**Composition comments** Some substances are not classified by legistlation.They are self classified by the manufacturer. The DMSO extract by IP 346 of the oil is less than 3%

**Ingredient notes** See Section 8 for occupational exposure limits. This SDS is prepared based on the information received from raw material suppliers.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

**General information** Treat symptomatically.

**Inhalation** Move affected person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.

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| | |
|---|---|
| **Ingestion** | Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention if any discomfort continues. |
| **Skin contact** | Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing. |
| **Eye contact** | Remove affected person from source of contamination. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention. |
| **Protection of first aiders** | First aid personnel should wear appropriate protective equipment during any rescue. |

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

| | |
|---|---|
| **General information** | See Section 11 for additional information on health hazards. |
| **Inhalation** | No specific symptoms known. |
| **Ingestion** | No specific symptoms known. |
| **Skin contact** | No specific symptoms known. |
| **Eye contact** | No specific symptoms known. |

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

| | |
|---|---|
| **Notes for the doctor** | Treat symptomatically. |
| **Specific treatments** | Treat symptomatically. |

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

| | |
|---|---|
| **Suitable extinguishing media** | The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire. |
| **Unsuitable extinguishing media** | Do not use water jet as an extinguisher, as this will spread the fire. |

### 5.2. Special hazards arising from the substance or mixture

| | |
|---|---|
| **Specific hazards** | Not known. |
| **Hazardous combustion products** | A complex mixture of airborne solids, liquids and gases can be released. Smoke and irritating vapours as products of incomplete combustion. Carbon dioxide ($CO_2$). Carbon monoxide (CO). Oxides of nitrogen. Oxides of sulphur. Oxides of phosphorus. |

### 5.3. Advice for firefighters

| | |
|---|---|
| **Protective actions during firefighting** | Avoid breathing fire gases or vapours. |
| **Special protective equipment for firefighters** | Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. |

## SECTION 6: Accidental release measures

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

| | |
|---|---|
| **Personal precautions** | Wear protective clothing as described in Section 8 of this safety data sheet. |
| **For non-emergency personnel** | Necessary precautions should be taken to ensure that non-educated personnel do not intervene. |

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**For emergency responders** Notification: In case of spillage, notify the local authorities as appropriate or as necessary. Proper ventilation should be provided. Stop the leakage source if it can be done without risk.Limit spillage to prevent further contamination of soil, surface or ground water.Remove any spilled material as soon as possible by following the precautions in the section Exposure Controls / Personal Protection.Use suitable techniques such as non-flammable absorbent materials or pumping.When possible or appropriate, remove the contaminated soil from the area.Place contaminated products in disposable boxes and dispose of in accordance with regulations.If a heated material is spilled, allow it to cool before handling with disposal methods.

### 6.2. Environmental precautions

**Environmental precautions** Avoid discharge into drains or watercourses or onto the ground.

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

**Methods for cleaning up** Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses.

### 6.4. Reference to other sections

**Reference to other sections** For personal protection, see Section 8. For waste disposal, see Section 13. See Section 1 for emergency contact information. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions** Good ventilation should be provided in the working environment and inhalation of vapor generated during use should be avoided.
Skin contact should be avoided and hygienic rules should be followed.
Eye contact should be avoided. Wear goggles or a face mask to prevent eye contact.
Avoid eating, drinking and smoking while using. Use disposable clothing. Prevent soil contamination or spillage into sewage systems and water.

**Advice on general occupational hygiene** Persons susceptible to allergic reactions should not handle this product. Do not eat, drink or smoke when using this product. Eye wash facilities and emergency shower must be available when handling this product. Good personal hygiene procedures should be implemented. Take off contaminated clothing.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage precautions** Store in tightly-closed, original container in a dry, cool and well-ventilated place. Store in accordance with national regulations. Store in a demarcated bunded area to prevent release to drains and/or watercourses.

**Storage class** Chemical storage.

### 7.3. Specific end use(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.2.

**Usage description** The product must be used as specified in the data sheet.

## SECTION 8: Exposure controls/Personal protection

### 8.1. Control parameters

#### Occupational exposure limits

No other information known.

**Ingredient comments** WEL = Workplace Exposure Limits

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| | |
|---|---|
| **Biological limit values** | No other information known. |
| **DNEL** | No other information known. |
| **DMEL** | No other information known. |
| **PNEC** | No other information known. |

**Highly refined mineral oil (CAS: 64742-01-4)**

| | |
|---|---|
| **Ingredient comments** | Oil Mist TWA: 5 mg /m3 (ACGIH). |

## 8.2. Exposure controls

**Protective equipment**

| | |
|---|---|
| **Appropriate engineering controls** | Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients. |
| **Personal protection** | Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers. |
| **Eye/face protection** | Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles or face shield. |
| **Hand protection** | Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. |
| **Other skin and body protection** | Wear appropriate clothing to prevent any possibility of skin contact. |
| **Hygiene measures** | Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke. |
| **Respiratory protection** | No specific recommendations. Respiratory protection may be required if excessive airborne contamination occurs. |
| **Thermal hazards** | If there is a risk of contact with hot product, all protective equipment worn should be suitable for use with high temperatures. |
| **Environmental exposure controls** | Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Store in a demarcated bunded area to prevent release to drains and/or watercourses. Residues and empty containers should be taken care of as hazardous waste according to local and national provisions. |

## SECTION 9: Physical and chemical properties

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

| | |
|---|---|
| **Appearance** | Liquid. |
| **Colour** | Brown. |
| **Odour** | Characteristic. |
| **Odour threshold** | No specific test data are available. |
| **pH** | Scientifically unjustified. |

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| | |
|---|---|
| **Melting point** | No specific test data are available. |
| **Initial boiling point and range** | No specific test data are available. |
| **Flash point** | >=240°C OC (Open cup). |
| **Evaporation rate** | No specific test data are available. |
| **Evaporation factor** | No specific test data are available. |
| **Flammability (solid, gas)** | No specific test data are available. |
| **Upper/lower flammability or explosive limits** | No specific test data are available. |
| **Other flammability** | No specific test data are available. |
| **Vapour pressure** | No specific test data are available. |
| **Vapour density** | No specific test data are available. |
| **Relative density** | No specific test data are available. |
| **Bulk density** | ~ 0,91 @ 15ºC g/ml |
| **Solubility(ies)** | Insoluble in water. |
| **Partition coefficient** | No specific test data are available. |
| **Auto-ignition temperature** | No specific test data are available. |
| **Decomposition Temperature** | No specific test data are available. |
| **Viscosity** | 1350-1650 cSt @ 40°C |
| **Explosive properties** | No information available. |
| **Explosive under the influence of a flame** | Not known. |
| **Oxidising properties** | Not known. |
| **Comments** | No other information known. |

### 9.2. Other information

| | |
|---|---|
| **Other information** | No other information known. |
| **Refractive index** | No other information known. |
| **Particle size** | No other information known. |
| **Molecular weight** | No other information known. |
| **Volatility** | No other information known. |
| **Saturation concentration** | No other information known. |
| **Critical temperature** | No other information known. |
| **Volatile organic compound** | No other information known. |

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

| | |
|---|---|
| **Reactivity** | This product is stable under normal conditions. |

### 10.2. Chemical stability

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**Stability** Stable at normal ambient temperatures.

### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** No hazardous reaction under normal conditions of storage and use.

### 10.4. Conditions to avoid

**Conditions to avoid** Keep away from heat, sparks and open flame. Avoid excessive heat for prolonged periods of time. Static electricity and formation of sparks must be prevented.

### 10.5. Incompatible materials

**Materials to avoid** Strong acids. Strong alkalis.

### 10.6. Hazardous decomposition products

**Hazardous decomposition products** Carbon monoxide (CO). Carbon dioxide (CO2). Oxides of nitrogen. Sulfur oxides. Phosphor oxides. Thermal decomposition or combustion may generate smoke, carbon monoxide, carbon dioxide,irritating vapors and other products of incomplete combustion.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

**Toxicological effects** Based on available data the classification criteria are not met.

**Other health effects** Based on available data the classification criteria are not met.

**Acute toxicity - oral**

**Summary** Based on available data the classification criteria are not met.

**Notes (oral $LD_{50}$)** Based on available data the classification criteria are not met.

**Acute toxicity - dermal**

**Summary** Based on available data the classification criteria are not met.

**Notes (dermal $LD_{50}$)** Based on available data the classification criteria are not met.

**ATE dermal (mg/kg)** 179,372.2

**Acute toxicity - inhalation**

**Summary** Based on available data the classification criteria are not met.

**Notes (inhalation $LC_{50}$)** Based on available data the classification criteria are not met.

**ATE inhalation (vapours mg/l)** 298.95

**Skin corrosion/irritation**

**Summary** Based on available data the classification criteria are not met.

**Skin corrosion/irritation** Based on available data the classification criteria are not met.

**Animal data** Based on available data the classification criteria are not met.

**Human skin model test** Based on available data the classification criteria are not met.

**Extreme pH** Based on available data the classification criteria are not met.

**Serious eye damage/irritation**

**Summary** Based on available data the classification criteria are not met.

**Serious eye damage/irritation** Based on available data the classification criteria are not met.

**Respiratory sensitisation**

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| | |
|---|---|
| **Summary** | Based on available data the classification criteria are not met. |
| **Respiratory sensitisation** | Based on available data the classification criteria are not met. |

**Skin sensitisation**

| | |
|---|---|
| **Summary** | Skin Sens. = Skin sensitisation |
| **Skin sensitisation** | Sensitising. Supplier's information. |

**Germ cell mutagenicity**

| | |
|---|---|
| **Summary** | Based on available data the classification criteria are not met. |
| **Genotoxicity - in vitro** | Based on available data the classification criteria are not met. |
| **Genotoxicity - in vivo** | Based on available data the classification criteria are not met. |

**Carcinogenicity**

| | |
|---|---|
| **Summary** | Based on available data the classification criteria are not met. |
| **Carcinogenicity** | Based on available data the classification criteria are not met. |
| **Target organ for carcinogenicity** | No specific target organs known. |
| **IARC carcinogenicity** | Not listed. |
| **NTP carcinogenicity** | Not listed. |

**Reproductive toxicity**

| | |
|---|---|
| **Summary** | Based on available data the classification criteria are not met. |
| **Reproductive toxicity - fertility** | Based on available data the classification criteria are not met. |
| **Reproductive toxicity - development** | Based on available data the classification criteria are not met. |

**Specific target organ toxicity - single exposure**

| | |
|---|---|
| **Summary** | Based on available data the classification criteria are not met. |
| **STOT - single exposure** | Based on available data the classification criteria are not met. |
| **Target organs** | No specific target organs known. |

**Specific target organ toxicity - repeated exposure**

| | |
|---|---|
| **Summary** | Based on available data the classification criteria are not met. |
| **STOT - repeated exposure** | Based on available data the classification criteria are not met. |
| **Target organs** | No specific target organs known. |

**Aspiration hazard**

| | |
|---|---|
| **Summary** | Based on available data the classification criteria are not met. |
| **Aspiration hazard** | Based on available data the classification criteria are not met. |

| | |
|---|---|
| **Toxicokinetics** | No other information known. |
| **General information** | No other information known. |
| **Inhalation** | Gas or vapour in high concentrations may irritate the respiratory system. Symptoms following overexposure may include the following: Coughing. |
| **Ingestion** | May cause discomfort if swallowed. |

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| | |
|---|---|
| **Skin contact** | Liquid may irritate skin. |
| **Eye contact** | May cause temporary eye irritation. |
| **Acute and chronic health hazards** | No other information known. |
| **Route of exposure** | No other information known. |
| **Target organs** | No specific target organs known. |
| **Medical symptoms** | No other information known. |
| **Medical considerations** | No other information known. |

**Toxicological information on ingredients.**

**Highly refined mineral oil**

**Acute toxicity - oral**

| | |
|---|---|
| **Notes (oral $LD_{50}$)** | $LD_{50}$ >2000 mg/kg, Oral, |

**Acute toxicity - dermal**

| | |
|---|---|
| **Notes (dermal $LD_{50}$)** | $LD_{50}$ >2000 mg/kg, Dermal, |

**Mineral oil (mixture)**

**Skin sensitisation**

| | |
|---|---|
| **Skin sensitisation** | Classification: Not a skin sensitizer. (Read across) (Supplier information) |

**Specific target organ toxicity - single exposure**

| | |
|---|---|
| **STOT - single exposure** | If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract. (Supplier information) |

**Aspiration hazard**

| | |
|---|---|
| **Aspiration hazard** | Material can be aspirated into the lungs during the act of swallowing or vomiting. This could result in severe injury to the lungs and death. (Supplier information) |

**Distilatlar (petrol), hidrojen ile işlenmiş hafif naftenik**

**Aspiration hazard**

| | |
|---|---|
| **Aspiration hazard** | Material can be aspirated into the lungs during the act of swallowing or vomiting. This could result in severe injury to the lungs and death. (Supplier information) |

**Distillates (petroleum), hydrotreated heavy naphthenic**

**Acute toxicity - oral**

| | |
|---|---|
| **Notes (oral $LD_{50}$)** | $LD_{50}$ >5000 mg/kg, Oral, Rat |

**Acute toxicity - dermal**

| | |
|---|---|
| **Notes (dermal $LD_{50}$)** | $LD_{50}$ >5000 mg/kg, Dermal, Rabbit |

**Acute toxicity - inhalation**

| | |
|---|---|
| **Species** | Rat |
| **Notes (inhalation $LC_{50}$)** | LC50 >5.53 mg/l, Inhalation, Rat |

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| | |
|---|---|
| **ATE inhalation (dusts/mists mg/l)** | 5.53 |

**Skin corrosion/irritation**

| | |
|---|---|
| **Summary** | Not irritating. Supplier's information. |

**Serious eye damage/irritation**

| | |
|---|---|
| **Summary** | Not irritating. Supplier's information. |

**Skin sensitisation**

| | |
|---|---|
| **Summary** | Not sensitising. Supplier's information. |

**Germ cell mutagenicity**

| | |
|---|---|
| **Genotoxicity - in vitro** | Bacterial reverse mutation test: Negative. Chromosome aberration: Negative. Gene mutation: Negative. Supplier's information. |
| **Genotoxicity - in vivo** | Micronucleus Test: Negative. Supplier's information. |

**Carcinogenicity**

| | |
|---|---|
| **Summary** | Based on available data the classification criteria are not met. Supplier's information. |

**Reproductive toxicity**

| | |
|---|---|
| **Reproductive toxicity - fertility** | Based on available data the classification criteria are not met. Supplier's information. |
| **Reproductive toxicity - development** | Based on available data the classification criteria are not met. Supplier's information. |

**Phosphoric acid, mono- and bis(branched and linear pentyl) esters**

**Acute toxicity - oral**

| | |
|---|---|
| **Notes (oral $LD_{50}$)** | $LD_{50}$ >2000 mg/kg, Oral, Rat |

**Germ cell mutagenicity**

| | |
|---|---|
| **Genotoxicity - in vitro** | Bacterial reverse mutation test: Negative. Gene mutation: Negative. Micronucleus Test: Negative. |

**Reproductive toxicity**

| | |
|---|---|
| **Reproductive toxicity - fertility** | Negative. Combined Repeated Dose Toxicity Study with the Reproduction/ Developmental Toxicity Screening Test - NOAEL 300 mg/kg, Oral, Rat |
| **Reproductive toxicity - development** | Negative. Combined Repeated Dose Toxicity Study with the Reproduction/ Developmental Toxicity Screening Test - NOAEL: 300 mg/kg, Oral, Rat |

**Amines, C10-14-tert-alkyl**

**Acute toxicity - oral**

| | |
|---|---|
| **Notes (oral $LD_{50}$)** | $LD_{50}$ 612 mg/kg, Oral, Rat |
| **ATE oral (mg/kg)** | 500.0 |

**Acute toxicity - dermal**

| | |
|---|---|
| **Notes (dermal $LD_{50}$)** | $LD_{50}$ 251 mg/kg, Dermal, Rat Repeated Dose: NOAEL 20 mg/kg, Dermal, Rat |
| **ATE dermal (mg/kg)** | 300.0 |

**Acute toxicity - inhalation**

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| | |
|---|---|
| **Notes (inhalation $LC_{50}$)** | LC50 1,19 mg/l, Inhalation, Rat Repeated Dose: NOAEL 19 mg/m³, Inhalation, Rat |
| **ATE inhalation (vapours mg/l)** | 0.5 |
| **Skin corrosion/irritation** | |
| **Skin corrosion/irritation** | Rabbit: Skin-Visible necrosis. |
| **Serious eye damage/irritation** | |
| **Serious eye damage/irritation** | Rabbit: Eyes- Visible necrosis. |
| **Skin sensitisation** | |
| **Skin sensitisation** | Guinea pig Skin Sens. = Skin sensitisation |
| **Germ cell mutagenicity** | |
| **Genotoxicity - in vitro** | Bacterial reverse mutation test: Negative. Gene mutation: Negative. |
| **Reproductive toxicity** | |
| **Reproductive toxicity - fertility** | One-generation study, Fertility - Negative , Oral, Rat |
| **Reproductive toxicity - development** | One-generation study, Fertility - : Negative , Oral, Rat One-generation study, Maternal toxicity: - : Positive , Oral, Rat |

**1,3,4–Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-nonanethiol**

| | |
|---|---|
| **Acute toxicity - oral** | |
| **Notes (oral $LD_{50}$)** | $LD_{50}$ >10000 mg/kg, Oral, Rat |
| **Acute toxicity - dermal** | |
| **Notes (dermal $LD_{50}$)** | $LD_{50}$ >2000 mg/kg, Dermal, Rabbit |
| **Acute toxicity - inhalation** | |
| **Notes (inhalation $LC_{50}$)** | LC50 >2,75 mg/l, Inhalation, Rat |
| **Skin corrosion/irritation** | |
| **Skin corrosion/irritation** | Moderately irritating. Rabbit Supplier's information. |
| **Skin sensitisation** | |
| **Summary** | Not sensitising. Supplier's information. |
| **Germ cell mutagenicity** | |
| **Genotoxicity - in vitro** | Bacterial reverse mutation test: Negative. Chromosome aberration: Negative. Supplier's information. |

**C16-18-(even numbered, saturated and unsaturated)- alkylamines**

| | |
|---|---|
| **Acute toxicity - oral** | |
| **Notes (oral $LD_{50}$)** | $LD_{50}$ 1689 mg/kg, Oral, Rat |
| **ATE oral (mg/kg)** | 500.0 |
| **Skin corrosion/irritation** | |
| **Summary** | Rabbit: Skin-Visible necrosis. |
| **Germ cell mutagenicity** | |

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| | |
|---|---|
| **Genotoxicity - in vitro** | : Negative. |
| **Reproductive toxicity** | |
| **Reproductive toxicity - fertility** | - Negative , Oral, Rat |
| **Reproductive toxicity - development** | Maternal toxicity: - : Positive , Oral, Rat Developmental toxicity: - : Negative , Oral, Rat |
| **Aspiration hazard** | |
| **Summary** | Aspiration Hazard |

**Exchangeable neutral oils**

| | |
|---|---|
| **Acute toxicity - oral** | |
| **Notes (oral $LD_{50}$)** | $LD_{50}$ >2000 mg/kg, Oral, Rat |
| **Acute toxicity - dermal** | |
| **Notes (dermal $LD_{50}$)** | $LD_{50}$ >2000 mg/kg, Dermal, Rabbit |

## SECTION 12: Ecological information

| | |
|---|---|
| **Ecotoxicity** | Aquatic Chronic = Hazardous to the aquatic environment (chronic) Aquatic Chronic 3 - H412 |

### 12.1. Toxicity

| | |
|---|---|
| **Toxicity** | Harmful to aquatic life with long lasting effects. |
| **Acute aquatic toxicity** | |
| **Summary** | No other information known. |
| **Acute toxicity - fish** | No other information known. |
| **Acute toxicity - aquatic invertebrates** | No other information known. |
| **Acute toxicity - aquatic plants** | No other information known. |
| **Acute toxicity - microorganisms** | No other information known. |
| **Acute toxicity - terrestrial** | No other information known. |
| **Chronic aquatic toxicity** | |
| **Summary** | No other information known. |
| **Chronic toxicity - fish early life stage** | No other information known. |
| **Short term toxicity - embryo and sac fry stages** | No other information known. |
| **Chronic toxicity - aquatic invertebrates** | No other information known. |
| **Toxicity to soil** | No other information known. |
| **Toxicity to terrestrial plants** | No other information known. |

**Ecological information on ingredients.**

**Mineral oil (mixture)**

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**Acute aquatic toxicity**

| | |
|---|---|
| **Acute toxicity - fish** | $LC_{50}$, 4 day: >100 mg/l, Fathead Minnow |
| **Acute toxicity - aquatic invertebrates** | $EC_{50}$, 2 day: >10000 mg/l, Daphnia magna<br>$EC_{50}$, 21 day: >10 mg/l, Daphnia magna<br>NOEC, 21 day: >10 mg/l, Daphnia magna |
| **Acute toxicity - aquatic plants** | $EC_{50}$, 3 day: >100 mg/l, Scenedesmus quadricauda |

**Distilatlar (petrol), hidrojen ile işlenmiş hafif naftenik**

**Acute aquatic toxicity**

| | |
|---|---|
| **Acute toxicity - aquatic invertebrates** | $EC_{50}$, 2 day: >10000 mg/l, Daphnia magna<br>$EC_{50}$, 21 day: >10 mg/l, Daphnia magna<br>NOEC, 21 day: 10 mg/l, Daphnia magna |

**Distillates (petroleum), hydrotreated heavy naphthenic**

**Acute aquatic toxicity**

| | |
|---|---|
| **Acute toxicity - fish** | $LL_{50}$, 96 hour: >100 mg/l, Pimephales promelas (Fat-head Minnow) |
| **Acute toxicity - aquatic invertebrates** | EL50, 48 hour: >1000 mg/l, Daphnia magna |

**Chronic aquatic toxicity**

| | |
|---|---|
| **Chronic toxicity - fish early life stage** | NOEL, 14 day: 1000 mg/l, Oncorhynchus mykiss (Rainbow trout) |
| **Chronic toxicity - aquatic invertebrates** | NOEL, 72 hour: >100 mg/l, Alg<br>NOEL, 21 day: 10 mg/l, Daphnia magna |

**Phosphoric acid, mono- and bis(branched and linear pentyl) esters**

**Acute aquatic toxicity**

| | |
|---|---|
| **Acute toxicity - fish** | $LL_{50}$, 96 hour: >100 mg/l, Oncorhynchus mykiss (Rainbow trout) |
| **Acute toxicity - aquatic invertebrates** | $EC_{50}$, 48 hour: 56 mg/l, Daphnia magna |
| **Acute toxicity - aquatic plants** | EL50, 72 hour: >100 mg/l, Pseudokirchneriella subcapitata |
| **Acute toxicity - microorganisms** | $EC_{50}$, 3 hour: >1000 mg/l, Micro-organisms |

**Chronic aquatic toxicity**

| | |
|---|---|
| **Chronic toxicity - aquatic invertebrates** | EL10, 72 hour: 24 mg/l, Alg |

**Amines, C10-14-tert-alkyl**

**Acute aquatic toxicity**

| | |
|---|---|
| **$LE(C)_{50}$** | 0.1 < L(E)C50 ≤ 1 |
| **M factor (Acute)** | 1 |
| **Acute toxicity - fish** | $LL_{50}$, 96 hours: 63,5 mg/l, Oncorhynchus mykiss (Rainbow trout) |

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| | |
|---|---|
| **Acute toxicity - aquatic invertebrates** | EL50, 48 hour: 2,5 mg/l, Daphnia magna |
| **Acute toxicity - aquatic plants** | EL50, 72 hour: 0,44 mg/l, Pseudokirchneriella subcapitata |
| **Acute toxicity - microorganisms** | EL50, 30 minutes: 63,5 mg/l, Micro-organisms |
| **Chronic aquatic toxicity** | |
| **M factor (Chronic)** | 1 |
| **Chronic toxicity - fish early life stage** | NOEC, 96 day: 0,078 mg/l, Oncorhynchus mykiss (Rainbow trout) |
| **Chronic toxicity - aquatic invertebrates** | NOEL, 72 hours: 0,05 mg/l, Alg |

**1,3,4–Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-nonanethiol**

| | |
|---|---|
| **Acute aquatic toxicity** | |
| **Acute toxicity - aquatic invertebrates** | $EC_{50}$, 48 hour: 41 mg/l, Daphnia magna |

**C16-18-(even numbered, saturated and unsaturated)- alkylamines**

| | |
|---|---|
| **Acute aquatic toxicity** | |
| **LE(C)$_{50}$** | 0.01 < L(E)C50 ≤ 0.1 |
| **M factor (Acute)** | 10 |
| **Acute toxicity - fish** | $LL_{50}$, 96 hour: 0,06 mg/l, Pimephales promelas (Fat-head Minnow) |
| **Acute toxicity - aquatic invertebrates** | EL50, 48 hour: 0,011 mg/l, Daphnia magna |
| **Acute toxicity - aquatic plants** | EL50, 96 hour: 0,04 mg/l, Algae |
| **Acute toxicity - microorganisms** | EL50, 3 hour: 222,5 mg/l, Micro-organisms |
| **Chronic aquatic toxicity** | |
| **M factor (Chronic)** | 10 |
| **Chronic toxicity - aquatic invertebrates** | NOEL, 21 day: 0,013 mg/l, Daphnia magna<br>NOEL, 96 hour: 0,01 mg/l, Alg |

## 12.2. Persistence and degradability

| | |
|---|---|
| **Persistence and degradability** | No other information known. |
| **Phototransformation** | No other information known. |
| **Stability (hydrolysis)** | No other information known. |
| **Biodegradation** | No other information known. |
| **Biological oxygen demand** | No other information known. |
| **Chemical oxygen demand** | No other information known. |

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**Ecological information on ingredients.**

**Mineral oil (mixture)**

**Biodegradation** Carbon dioxide formation - 31: 28 day, OECD TG 301B

**Distilatlar (petrol), hidrojen ile işlenmiş hafif naftenik**

**Biodegradation** Oxygen discharge - 31 %: 28 day, OECD TG 301 F

**Distillates (petroleum), hydrotreated heavy naphthenic**

**Biodegradation** Manometric Respirometry Test - Degradation 31 %: 28 day, OECD TG 301 F

**Phosphoric acid, mono- and bis(branched and linear pentyl) esters**

**Biodegradation** Carbon dioxide formation - 45 %: 28 day, OECD TG 301B

**Amines, C10-14-tert-alkyl**

**Biodegradation** Closed Bottle Test - Degradation 21,8%: 28 day, OECD TG 301 D

**C16-18-(even numbered, saturated and unsaturated)- alkylamines**

**Biodegradation** Carbon dioxide formation - Degradation 66 %: 28 day, OECD TG 301B

### 12.3. Bioaccumulative potential

**Bioaccumulative potential** No other information known.

**Partition coefficient** No specific test data are available.

**Ecological information on ingredients.**

**Amines, C10-14-tert-alkyl**

**Bioaccumulative potential** log Pow: 2,9,

### 12.4. Mobility in soil

**Mobility** No other information known.

**Adsorption/desorption coefficient** No other information known.

**Henry's law constant** No other information known.

**Surface tension** No other information known.

### 12.5. Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** Not applicable.

### 12.6. Other adverse effects

**Other adverse effects** No other information known.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**General information** The generation of waste should be minimised or avoided wherever possible.

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| | |
|---|---|
| **Disposal methods** | Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Reuse or recycle products wherever possible. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. |
| **Waste class** | The waste code classification is to be carried out according to the European Waste Catalogue (EWC). |

## SECTION 14: Transport information

| | |
|---|---|
| **General** | The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID). |

### 14.1. UN number

Not applicable.

### 14.2. UN proper shipping name

Not applicable.

### 14.3. Transport hazard class(es)

No transport warning sign required.

### 14.4. Packing group

Not applicable.

### 14.5. Environmental hazards

**Environmentally hazardous substance/marine pollutant**
No.

### 14.6. Special precautions for user

Not applicable.

### 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

| | |
|---|---|
| **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** | Not applicable. |

## SECTION 15: Regulatory information

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

| | |
|---|---|
| **National regulations** | T. C. Regulation on the Classification, Labeling and Packaging of Substances and Mixtures No. 28848, dated 11 December 2013, by the Ministry of Environment and Urbanization.<br>T. C. Ministry of Environment and Urbanization Regulation on Safety Data Sheets on Hazardous Substances and Mixtures |
| **EU legislation** | https://echa.europa.eu<br>Commission Regulation (EU) No 453/2010 of 20 May 2010. |
| **Guidance** | Safety Data Sheets for Substances and Preparations. |
| **Health and environmental listings** | Hazardous ingredients are listed. |

### 15.2. Chemical safety assessment

## SECTION 16: Other information

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| | |
|---|---|
| **Abbreviations and acronyms used in the safety data sheet** | T.C. : Republic of Turkey<br>DMSO: Dimethyl sulfoxide<br>KKE: Personal protective aquipment<br>E.U. : European union<br>UZEM: National Poison Information Center<br>DNEL: Derived No Effect Level.<br>CAS: Chemical Abstracts Service.<br>Kow: Octanol-water partition coefficient.<br>$LC_{50}$: Lethal Concentration to 50 % of a test population.<br>$LD_{50}$: Lethal Dose to 50% of a test population (Median Lethal Dose).<br>PBT: Persistent, Bioaccumulative and Toxic substance.<br>vPvB: Very Persistent and Very Bioaccumulative.<br>REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006. |
| **Classification abbreviations and acronyms** | Skin Sens. = Skin sensitisation<br>Aquatic Chronic = Hazardous to the aquatic environment (chronic)<br>Asp. Tox. = Aspiration hazard<br>Acute Tox. = Acute toxicity<br>Skin Corr. = Skin corrosion<br>Eye Dam. = Serious eye damage<br>STOT SE = Specific target organ toxicity-single exposure<br>Aquatic Acute = Hazardous to the aquatic environment (acute)<br>STOT RE = Specific target organ toxicity-repeated exposure |
| **General information** | Only trained personnel should use this material. MSDS Distribution : The information in this document should be made available to all who may handle the product. Uses and Restrictions : This product must not be used in applications other than those recommended in Section 1, without first seeking the advice of the supplier. This product is not to be used as a solvent or cleaning agent; for lighting or brightening fires; as a skin cleanser. Disclaimer : This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. |
| **Key literature references and sources for data** | This SDS is prepared based on the information received from raw material suppliers. |
| **Classification procedures according to Regulation (EC) 1272/2008** | Skin Sens. 1 - H317: Calculation method., Supplier information Aquatic Chronic 3 - H412: Calculation method., Supplier information |
| **Training advice** | Untrained personnel should not use. |
| **Revision comments** | Revised classification. Adding content information. |
| **Issued by** | Sevda ŞAHAN Certified Safety Data Sheet Preparer (Certificate Id:GBF01.23.08;Dates: 03.11.2018-03.11.2021) |
| **Revision date** | 27/01/2020 |
| **Revision** | 4 |
| **Supersedes date** | 17/06/2011 |
| **SDS number** | 10044 |

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**Hazard statements in full**

H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H311 Toxic in contact with skin.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H330 Fatal if inhaled.
H335 May cause respiratory irritation.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.
H373 May cause damage to organs through prolonged or repeated exposure if swallowed or if inhaled.