



SAFETY DATA SHEET GRAVIS M 100

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 100

Product number 28152

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.
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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

Environmental The product is not expected to be hazardous to the environment.

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	<p>P261 Avoid breathing vapour/ spray.</p> <p>P272 Contaminated work clothing should not be allowed out of the workplace.</p> <p>P273 Avoid release to the environment.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water.</p> <p>P321 Specific treatment (see medical advice on this label).</p> <p>P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.</p> <p>P362+P364 Take off contaminated clothing and wash it before reuse.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>
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Contains Amines, C10-14-tert-alkyl

2.3. Other hazards

No other information known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Distillates (petroleum), hydrotreated heavy paraffinic 95-100%
CAS number: 64742-54-7 EC number: 265-157-1 REACH registration number: 01-2119484627-25-0033
Classification Not Classified
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
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

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General information	Treat symptomatically. 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 Carbon dioxide (CO₂). Carbon monoxide (CO). Oxides of nitrogen. Sulphur oxides. Oxides of phosphorus. Unidentified organic or inorganic compounds.

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.

For emergency responders 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.

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6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13. See Section 11 for additional information on health hazards. See Section 1 for emergency contact information. 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 Do not eat, drink or smoke when using this product. Persons susceptible to allergic reactions should not handle this product. Provide shower facilities near the workplace.

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 Not applicable.

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

Mineral oil: TWA: 5 mg/m³, 8 hours [EH-40 MEL, (Europe,2002)]

Distillates (petroleum), hydrotreated heavy paraffinic

Oil mist: TWA: 5 mg/m³ (ACGIH). In no case should this limit be exceeded or the local limit, if it is more restrictive.

Ingredient comments If this product contains a component with exclusion limits, to determine the effectiveness of ventilation and other control measures; and / or the necessity of the use of respiratory protective devices, the working environment or biological measurement and monitoring of employees may be required. The European Standard EN 689 and the relevant national guidelines should be taken as reference for the detection methods for assessing exposure to inhalation of chemicals of hazardous substances.

Biological limit values There is no available data.

DNEL There is no available data.

DMEL There is no available data.

PNEC There is no available data.

8.2. Exposure controls

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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

Residues and empty containers should be taken care of as hazardous waste according to local and national provisions. Keep container tightly sealed when not in use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Yellow.
Odour	Characteristic.
Odour threshold	Inconclusive data.
pH	Scientifically unjustified.
Melting point	Inconclusive data.
Initial boiling point and range	Inconclusive data.
Flash point	>230°C OC (Open cup).
Evaporation rate	Inconclusive data.
Evaporation factor	Inconclusive data.
Flammability (solid, gas)	Inconclusive data.
Upper/lower flammability or explosive limits	Inconclusive data.
Other flammability	Inconclusive data.

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Vapour pressure	Inconclusive data.
Vapour density	Inconclusive data.
Relative density	Inconclusive data.
Bulk density	~ 0,89 g/ml @ 15°C
Solubility(ies)	Insoluble in water.
Partition coefficient	Inconclusive data.
Auto-ignition temperature	Inconclusive data.
Decomposition Temperature	Inconclusive data.
Viscosity	90-110 cSt @ 40°C
Explosive properties	Inconclusive data.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	No data available.
Comments	Information declared as "Not available" or "Not applicable" is not considered to be relevant to the implementation of the proper control measures.

9.2. Other information

Other information	No information required.
Refractive index	Inconclusive data.
Particle size	Inconclusive data.
Molecular weight	Inconclusive data.
Volatility	Inconclusive data.
Saturation concentration	Inconclusive data.
Critical temperature	Inconclusive data.
Volatile organic compound	Inconclusive data.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	This product is stable under normal conditions.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	No hazardous reaction under normal conditions of storage and use.
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10.4. Conditions to avoid

Conditions to avoid	Avoid excessive heat for prolonged periods of time. Avoid contact with strong oxidising agents.
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10.5. Incompatible materials

Materials to avoid	Strong oxidising agents. Strong reducing agents. Strong acids. Strong alkalis.
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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 Information given is based on product data, a knowledge of the components and the toxicology of similar products.

Other health effects No relevant information available.

Acute toxicity - oral

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

Notes (oral LD₅₀) 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 LD₅₀) Based on available data the classification criteria are not met.

ATE dermal (mg/kg) 300,000.0

Acute toxicity - inhalation

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

Notes (inhalation LC₅₀) Based on available data the classification criteria are not met.

ATE inhalation (vapours mg/l) 500.0

Skin corrosion/irritation

Summary Expected to be slightly irritant.

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 Eye contact may cause irritation.

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

Respiratory sensitisation

Summary Mist may cause slight irritation if inhaled.

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Summary Skin Sens. 1 - H317

Skin sensitisation Sensitising.

Germ cell mutagenicity

Summary It is not expected to cause genetic damage in the light of current data.

Genotoxicity - in vitro Based on available data the classification criteria are not met.

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Genotoxicity - in vivo	Based on available data the classification criteria are not met.
<u>Carcinogenicity</u>	
Summary	The base oils in the product content contain less than 3% DMSO according to IP 346.
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.
<u>Reproductive toxicity</u>	
Summary	There is no test data indicating that this product has a toxic effect on the reproductive system.
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.
<u>Specific target organ toxicity - single exposure</u>	
Summary	There is no available data.
STOT - single exposure	Based on available data the classification criteria are not met.
Target organs	No specific target organs known.
<u>Specific target organ toxicity - repeated exposure</u>	
Summary	There is no available data.
STOT - repeated exposure	Based on available data the classification criteria are not met.
Target organs	No specific target organs known.
<u>Aspiration hazard</u>	
Summary	Slight irritation of the respiratory tract may occur, if mists are inhaled.
Aspiration hazard	Based on available data the classification criteria are not met.
Toxicokinetics	No information is required.
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.
Skin contact	Liquid may irritate skin.
Eye contact	May cause temporary eye irritation.
Acute and chronic health hazards	There is not enough data.
Route of exposure	There is no available data.
Target organs	No specific target organs known.
Medical symptoms	No specific tes data are available.
Medical considerations	No specific tes data are available.

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Toxicological information on ingredients.

Distillates (petroleum), hydrotreated heavy paraffinic

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ >2000 mg/kg, Oral,

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ >2000 mg/kg, Dermal,

Carcinogenicity

Summary

The base oils in the product content contain less than 3% DMSO according to IP 346.

Distillates (petroleum), hydrotreated heavy naphthenic

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ >5000 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ >5000 mg/kg, Dermal, Rabbit

Acute toxicity - inhalation

Species Rat

Notes (inhalation LC₅₀) LC₅₀ >5.53 mg/l, Inhalation, Rat

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

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Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ >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

Exchangeable neutral oils

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ >2000 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ >2000 mg/kg, Dermal, Rabbit

Amines, C10-14-tert-alkyl

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ 612 mg/kg, Oral, Rat

ATE oral (mg/kg) 500.0

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ 251 mg/kg, Dermal, Rat Repeated Dose: NOAEL 20 mg/kg, Dermal, Rat

ATE dermal (mg/kg) 300.0

Acute toxicity - inhalation

Notes (inhalation LC₅₀) 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

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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 LD₅₀) LD₅₀ >10000 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ >2000 mg/kg, Dermal, Rabbit

Acute toxicity - inhalation

Notes (inhalation LC₅₀) 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 LD₅₀) LD₅₀ 1689 mg/kg, Oral, Rat

ATE oral (mg/kg) 500.0

Skin corrosion/irritation

Summary Rabbit: Skin-Visible necrosis.

Germ cell mutagenicity

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

Fuelsi diesel

Carcinogenicity

Carcinogenicity Known or suspected carcinogen for humans.

SECTION 12: Ecological information

Ecotoxicity Aquatic Chronic 3 - H412

Ecological information on ingredients.

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Distillates (petroleum), hydrotreated heavy paraffinic

Ecotoxicity May be harmful to aquatic organisms. Spills form film layer on water surface and prevent oxygen transfer

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.

Distillates (petroleum), hydrotreated heavy naphthenic

Acute aquatic toxicity

Acute toxicity - fish LL₅₀, 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
NOEL, 21 day: 10 mg/l, Daphnia magna

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

Acute aquatic toxicity

Acute toxicity - fish LL₅₀, 96 hour: >100 mg/l, Oncorhynchus mykiss (Rainbow trout)

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Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hour: 56 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EL ₅₀ , 72 hour: >100 mg/l, Pseudokirchneriella subcapitata
Acute toxicity - microorganisms	EC ₅₀ , 3 hour: >1000 mg/l, Micro-organisms
<u>Chronic aquatic toxicity</u>	
Chronic toxicity - aquatic invertebrates	EL ₁₀ , 72 hour: 24 mg/l, Alg

Amines, C10-14-tert-alkyl

Acute aquatic toxicity

LE(C)₅₀	0.1 < L(E)C ₅₀ ≤ 1
M factor (Acute)	1
Acute toxicity - fish	LL ₅₀ , 96 hours: 63,5 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EL ₅₀ , 48 hour: 2,5 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EL ₅₀ , 72 hour: 0,44 mg/l, Pseudokirchneriella subcapitata
Acute toxicity - microorganisms	EL ₅₀ , 30 minutes: 63,5 mg/l, Micro-organisms
<u>Chronic aquatic toxicity</u>	
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
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C16-18-(even numbered, saturated and unsaturated)- alkylamines

Acute aquatic toxicity

LE(C)₅₀	0.01 < L(E)C ₅₀ ≤ 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	EL ₅₀ , 48 hour: 0,011 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EL ₅₀ , 96 hour: 0,04 mg/l, Algae

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Acute toxicity - microorganisms	EL50, 3 hour: 222,5 mg/l, Micro-organisms
<u>Chronic aquatic toxicity</u>	
M factor (Chronic)	10
Chronic toxicity - aquatic invertebrates	NOEL, 21 day: 0,013 mg/l, Daphnia magna NOEL, 96 hour: 0,01 mg/l, Alg

12.2. Persistence and degradability

Persistence and degradability	There are not enough test data. It is not expected that the product may be readily biodegradable based on the ingredients of this product.
Phototransformation	Inconclusive data.
Stability (hydrolysis)	Inconclusive data.
Biodegradation	Not readily biodegradable.
Biological oxygen demand	Inconclusive data.
Chemical oxygen demand	Inconclusive data.

Ecological information on ingredients.

Distillates (petroleum), hydrotreated heavy paraffinic

Biodegradation Not expected to be readily biodegradable.

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	Potentially bioaccumulating.
Partition coefficient	Inconclusive data.

Ecological information on ingredients.

Distillates (petroleum), hydrotreated heavy paraffinic

Bioaccumulative potential Potentially bioaccumulating.

Amines, C10-14-tert-alkyl

Bioaccumulative potential log Pow: 2,9,

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12.4. Mobility in soil

Mobility	The product is immiscible with water and will spread on the water surface.
Adsorption/desorption coefficient	Inconclusive data.
Henry's law constant	Inconclusive data.
Surface tension	Inconclusive data.

Ecological information on ingredients.

Distillates (petroleum), hydrotreated heavy paraffinic

Mobility	Liquid under most environmental conditions. Floats on water. If spread into ground the groundwater may be polluted.
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12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	Not applicable.
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Ecological information on ingredients.

Fuelsi diesel

Results of PBT and vPvB assessment	This product does not contain any substances classified as PBT or vPvB.
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12.6. Other adverse effects

Other adverse effects	Films formed on water may affect oxygen transfer and damage organisms.
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SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

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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 Not applicable.

**Annex II of MARPOL 73/78
and the IBC Code**

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. T. C. Ministry of Environment and Urbanization Regulation on Safety Data Sheets on Hazardous Substances and Mixtures
EU legislation	https://echa.europa.eu 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

Abbreviations and acronyms used in the safety data sheet	E.U. : European union DMSO: Dimethyl sulfoxide KKE: Personal protective equipment T.C. : Republic of Turkey UZEM: National Poison Information Center CAS: Chemical Abstracts Service. GHS: Globally Harmonized System. IATA: International Air Transport Association. ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air. IMDG: International Maritime Dangerous Goods. PBT: Persistent, Bioaccumulative and Toxic substance. REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006. vPvB: Very Persistent and Very Bioaccumulative.
Classification abbreviations and acronyms	STOT RE = Specific target organ toxicity-repeated exposure Skin Corr. = Skin corrosion Eye Dam. = Serious eye damage Acute Tox. = Acute toxicity Skin Sens. = Skin sensitisation Aquatic Acute = Hazardous to the aquatic environment (acute) Aquatic Chronic = Hazardous to the aquatic environment (chronic)

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General information	This document contains important information to ensure the safe storage, handling and use of this product. The information in this document should be brought to the attention of the person in your organisation responsible for advising on safety matters. 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. MSDS Distribution : The information in this document should be made available to all who may handle the product. 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.
Issued by	Emrah Parmak Sevda ŞAHAN Certified Safety Data Sheet Preparer (Certificate Id:GBF01.23.08;Dates: 03.11.2018-03.11.2021)
Revision date	20/04/2020
Revision	3
Supersedes date	17/06/2011
SDS number	10036
SDS status	Approved.
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. H351 Suspected of causing cancer if swallowed. 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.

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