



SAFETY DATA SHEET

Gulf ATF DX II

04102/2EU

Issuing Date 05-20-2022

Revision Date 05-20-2022

Version 1.1

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Name **Gulf ATF DX II**
Product Code(s) 04102/2EU

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

Recommended Use Automatic transmission fluids

Uses advised against Any other purpose.

1.3. Details of the supplier of the safety data sheet

Supplier Gulf Oil Supply Company Limited
B2 Industry Street, Qormi, QRM 3000, Malta
Tel: +44 207 321 6219
E-mail: products@gulfoilltd.com, sds@gulfoilltd.com

1.4. Emergency telephone number

Europe: (+) 44 808 189 0979 (Code 334276)
(+) 1 760 476 3961 (Code 334276)
(+) 32 (0) 3241 33 55

Poison Information Center telephone number (IE) +353 (0)1 809 2166 (08:00 - 22:00), (IS) +354 543 2222

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

| | |
|--------------------------|---------------------|
| Chronic aquatic toxicity | Category 3 - (H412) |
|--------------------------|---------------------|

2.2. Label elements

Signal word
None

Hazard statements
H412 - Harmful to aquatic life with long lasting effects

Precautionary statements
P273 - Avoid release to the environment
P501 - Dispose of contents/ container to an approved waste disposal plant

2.3. Other hazards

No information available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.2 Mixtures**

This product is a mixture. Health hazard information is based on its ingredients

| Chemical name | EC No | CAS No | Weight-% | Classification according to Regulation (EC) No. 1272/2008 [CLP] | REACH registration number |
|---|-----------|-----------------|------------|---|---------------------------|
| Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C) | - | - | 50% - 100% | Asp. Tox. 1 (H304) (EUH066) | - |
| Highly refined base oil (Viscosity >20.5 cSt @40°C) | - | - | 2.5% - 10% | ** | - |
| Short-, medium- and long-chain alkyl methacrylates and short-chain alkyl methacrylamide copolymer | - | ACC-QT664993-91 | 2.5% - 10% | Eye Irrit. 2 (H319) | **** |
| 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol | 620-540-6 | 1218787-32-6 | 0% - 1% | Acute Tox. 4 (H302) Skin Corr. 1C (H314) Eye Dam. 1 (H318) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) M-Factor: Acute 10, Chronic 1 | 01-2119510877-33-xxxx |
| 3-((C9-11-iso,C10-rich)alkoxy)propan-1-amine | 939-485-7 | NOT AVAILABLE | 0% - 1% | Acute Tox. 4 (H302) Skin Corr. 1B (H314) Eye Dam. 1 (H318) Aquatic Chronic 1 (H400) Aquatic Chronic 1 (H410) M-Factor: Acute 100, Chronic 1 | 01-2119974116-35-xxxx |

Product containing mineral oil with less than 3% DMSO extract as measured by IP 346. See Section 15 for additional information on base oils. The highly refined base oil may be described by one or more of the following generic CAS identifiers: 64742-54-7, 64742-65-0, 64742-52-5, 64742-53-6, 64742-62-7, 64742-57-0, 64742-01-4, 64741-88-4, 64741-96-4, 64741-97-5, 64742-55-8, 64742-56-9, 64741-89-5, 8042-47-5.

** Substances for which there are Community workplace exposure limits

**** Proprietary

Full text of H- and EUH-phrases: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

| | |
|---|---|
| General advice | If symptoms persist, call a physician. |
| Inhalation | Remove to fresh air. |
| Skin contact | Wash off immediately with soap and plenty of water. Take off contaminated clothing and wash before reuse. |
| Eye contact | Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing. |
| Ingestion | Clean mouth with water. Drink plenty of water. Do not induce vomiting without medical advice. |
| Self-protection of the first aider | Use personal protective equipment as required. |

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

| | |
|-----------------|-------------|
| Symptoms | None known. |
|-----------------|-------------|

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

| | |
|---------------------------|------------------------|
| Note to physicians | Treat symptomatically. |
|---------------------------|------------------------|

SECTION 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use: Carbon dioxide (CO₂). Dry chemical. Foam. Water spray or fog. Cool containers with flooding quantities of water until well after fire is out.

Unsuitable extinguishing media

Do not use straight streams. Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors. In the event of fire and/or explosion do not breathe fumes. The product is insoluble and floats on water.

| | |
|--------------------------------------|---|
| Hazardous combustion products | Carbon monoxide. Carbon dioxide (CO ₂). |
|--------------------------------------|---|

5.3. Advice for firefighters

| | |
|---|---|
| Special protective equipment for fire-fighters | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. |
|---|---|

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

| | |
|---------------------------------|---|
| Personal precautions | Remove all sources of ignition. Ensure adequate ventilation. Extremely slippery when spilled. |
| For emergency responders | Use personal protection recommended in Section 8. |

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up

| | |
|--|--|
| Methods for containment | Dike to collect large liquid spills. |
| Methods for cleaning up | Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Take up mechanically, placing in appropriate containers for disposal. |
| Prevention of secondary hazards | Clean contaminated objects and areas thoroughly observing environmental regulations. |

6.4. Reference to other sections

See section 8 for more information. See section 13 for more information.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

| | |
|---------------------------------------|---|
| Advice on safe handling | Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. |
| General hygiene considerations | When using do not eat, drink or smoke. Take off contaminated clothing and wash before reuse. |

7.2. Conditions for safe storage, including any incompatibilities

| | |
|---------------------------|---|
| Storage Conditions | Keep container tightly closed in a dry and well-ventilated place. Keep cool. Protect from sunlight. Keep away from open flames, hot surfaces and sources of ignition. |
| Materials to Avoid | Oxidizing agent |

7.3. Specific end use(s)

Automatic transmission fluids

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters**Exposure limits***Legend*

(s) - Skin; TWA - Time-Weighted Average; STEL - Short Term Exposure Limit; Ceiling - Ceiling Value; TLV® - Threshold Limit Value; PEL (Permissible Exposure Limit)

| Chemical name | European Union | United Kingdom | France | Spain |
|--|----------------|----------------|--------|---|
| Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C) | | | | VLA-EC: 10 mg/m ³ VLA-ED: 5 mg/m ³ |
| Highly refined base oil (Viscosity >20.5 cSt @40°C) | | | | VLA-EC: 10 mg/m ³ VLA-ED: 5 mg/m ³ |

Spain Límites de Exposición Profesional Para Agentes Químicos en España (Ley 31/1995).

| Chemical name | Germany | Italy | Portugal | Netherlands |
|--|---------|--------------------------|--|--------------------------|
| Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C) | | TWA: 5 mg/m ³ | TWA: 5 mg/m ³ STEL: 10 mg/m ³ | TWA: 5 mg/m ³ |
| Highly refined base oil (Viscosity >20.5 cSt @40°C) | | TWA: 5 mg/m ³ | TWA: 5 mg/m ³ STEL: 10 mg/m ³ | TWA: 5 mg/m ³ |

Italy Istituto Superiore per la Prevenzione e la Sicurezza del Lavoro (ISPESL), Allegato XXXVIII e Allegato XLIII - Valori Limite di Esposizione Professionale.

Portugal Valores-limite e índices biológicos de exposição profissional a agentes químicos. Quadro 1 - Valores Limite de Exposição (Norma Portuguesa NP 1796:2014).

Netherlands Grenswaarden gezondheidsschadelijke stoffen; Arbeidsomstandighedenregeling.

| Chemical name | Austria | Switzerland | Poland | Ireland |
|--|---------|-------------|---|--|
| Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C) | | | TWA: 5 mg/m ³ frakcja wdychalna | STEL: 10 mg/m ³ TWA: 5 mg/m ³ (Mist) |
| Highly refined base oil (Viscosity >20.5 cSt @40°C) | | | TWA: 5 mg/m ³ frakcja wdychalna | STEL: 10 mg/m ³ TWA: 5 mg/m ³ (Mist) |

Poland Rozporządzenie Ministra Pracy i Polityki Społecznej z dnia 6 czerwca 2014 w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy (Dz.U. 2016 Nr. 944).

Ireland 2016 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001.

| Chemical name | Finland | Denmark | Norway | Sweden |
|--|------------------------------------|-------------------------------------|-------------------------------------|--|
| Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C) | TWA: 5mg/m ³ (Öljysumu) | TWA: 1 mg/m ³ (Olietåge) | TWA: 1 mg/m ³ (Oljetåke) | TWA: 1 mg/m ³ STEL: 3 mg/m ³ (Oljedimma) |
| Highly refined base oil (Viscosity >20.5 cSt @40°C) | TWA: 5mg/m ³ (Öljysumu) | TWA: 1 mg/m ³ (Olietåge) | TWA: 1 mg/m ³ (Oljetåke) | TWA: 1 mg/m ³ STEL: 3 mg/m ³ (Oljedimma) |

Finland Förordningen om koncentrationer som befunnits skadliga, 268/2014 - HTP-arvot 2014.

Denmark Bekendtgørelse om grænseværdier for stoffer og materialer. Arbejdstilsynets bekendtgørelse nr. 507 Bilag 2 Afsnit A.

Norway Forskrift om tiltaksverdier og grenseverdier for fysiske og kjemiske faktorer i arbeidsmiljøet samt smitterisikogrupper for biologiske faktorer (Forskrift om tiltaks- og grenseverdier), FOR-2011-12-06-1358, FOR-2016-06-21-760, FOR-2016-12-22-1860.

Sweden Arbetsmiljöverkets föreskrifter om hygieniska gränsvärden och allmänna råd om tillämpningen av föreskrifterna.

| Chemical name | Czech Republic | Hungary | Bulgaria | Romania |
|--|---|--------------------------|--------------------------|--|
| Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C) | TWA: 5 mg/m ³ Ceiling: 10 mg/m ³ | TWA: 5 mg/m ³ | TWA: 5 mg/m ³ | TWA: 5 mg/m ³ STEL: 10 mg/m ³ |
| Highly refined base oil (Viscosity >20.5 cSt @40°C) | TWA: 5 mg/m ³ Ceiling: 10 mg/m ³ | TWA: 5 mg/m ³ | TWA: 5 mg/m ³ | TWA: 5 mg/m ³ STEL: 10 mg/m ³ |

Czech Republic Narizeni vlady 93/2012, kterym se meni narizeni vlady c.361/2007 Sb., kterym se stanoví podmínky ochrany zdraví při práci, ve znění narizeni vlady c.68/2010 Sb.

Hungary 25/2000. (IX. 30.) EüM-SzCsM együttes rendelet a munkahelyek kémiai biztonságáról (62/2016. (XII.29.)).

Bulgaria НАРЕДБА #13 от 30.12.2003 г. за защита на работещите от рискове, свързани с експозиция на химични агенти при работа.

Romania Valori Limit Obligatorii Nationale de expunere profesională ale agenților chimic - Anex Nr.1 Publicat în Monitorul Oficial, Partea I nr. 845.

| Chemical name | Greece | Cyprus | Turkey | Malta |
|--|--------------------------|--------|--------|-------|
| Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C) | TWA: 5 mg/m ³ | | | |
| Highly refined base oil (Viscosity >20.5 cSt @40°C) | TWA: 5 mg/m ³ | | | |

Greece Οριακές Τιμές Επαγγελματικής Έκθεσης - Προστασία της υγείας και της ασφάλειας των εργαζομένων που εκτίθενται σε ορισμένους καρκινογόνους και μεταλλαξιογόνους παράγοντες 127/2000.

| Chemical name | Belgium | Luxembourg | Iceland | Croatia |
|---------------|---------|------------|---------|---------|
|---------------|---------|------------|---------|---------|

| | | | | |
|--|--|--|--|--|
| Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C) | TWA: 5 mg/m ³ STEL: 10 mg/m ³ | | | |
| Highly refined base oil (Viscosity >20.5 cSt @40°C) | TWA: 5 mg/m ³ STEL: 10 mg/m ³ | | | |

Belgium Arrêté royal relatif à la protection de la santé et de la sécurité des travailleurs contre les risques liés à des agents chimiques sur le lieu de travail.

| Chemical name | Russia | Estonia | Latvia | Lithuania |
|--|--------|---------|--------------------------|---|
| Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C) | | | TWA: 5 mg/m ³ | TWA: 1 mg/m ³ STEL: 3 mg/m ³ |
| Highly refined base oil (Viscosity >20.5 cSt @40°C) | | | TWA: 5 mg/m ³ | TWA: 1 mg/m ³ STEL: 3 mg/m ³ |

Latvia Ministru Kabineta noteikumi Nr. 325 - Darba aizsardzības prasības, saskaroties ar ķīmiskajām vielām darbā vietās.

Lithuania Del Lietuvos higienos normos HN 23:2011 "Cheminių medžiagų profesinio poveikio ribiniai dydžiai. Matavimo ir poveikio vertinimo bendrieji reikalavimai".

| Chemical name | Belarus | Ukraine | Slovakia | Slovenia |
|--|---------|---------|-------------------------|----------|
| Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C) | | | TWA: 5mg/m ³ | |
| Highly refined base oil (Viscosity >20.5 cSt @40°C) | | | TWA: 5mg/m ³ | |

Slovakia Nariadenie Vlády Slovenskej republiky z 16. januára 2002 o ochrane zdravia pri práci s karcinogénnymi a mutagénnymi faktormi.

Derived No Effect Level (DNEL)

Workers Systemic toxicity

| Chemical name | Long term - Oral exposure | Long term - Dermal exposure | Long term - Inhalation exposure | Short term - Oral Exposure | Short term - Dermal exposure | Short term - Inhalation exposure |
|---|---------------------------|-----------------------------|---------------------------------|----------------------------|------------------------------|----------------------------------|
| 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol | | 0.3 mg/kg | | | | |
| 3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine | | 0.7 mg/kg | 4.9 mg/m ³ | | | |

Workers Local effects

Not determined

Consumers Systemic toxicity

| Chemical name | Long term - Oral exposure | Long term - Dermal exposure | Long term - Inhalation exposure | Short term - Oral Exposure | Short term - Dermal exposure | Short term - Inhalation exposure |
|---|---------------------------|-----------------------------|---------------------------------|----------------------------|------------------------------|----------------------------------|
| 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol | 0.21 mg/kg | 0.21 mg/kg | | | | |
| 3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine | 0.25 mg/kg | 0.25 mg/kg | 0.74 mg/m ³ | | | |

Consumers Local effects

Not determined

Predicted No Effect Concentration (PNEC)

| Chemical name | Fresh water | Sea water | Fresh water sediment | Sea sediment | Soil |
|---|--------------|---------------|----------------------|--------------|------------|
| 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol | 0.00021 mg/L | | | | |
| 3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine | 0.00042 mg/L | 0.000042 mg/L | 3.19 mg/kg | 0.32 mg/kg | 1.59 mg/kg |

8.2. Exposure controls

Engineering Measures

Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Engineering controls should be considered as the first line of protection against adverse exposure to harmful substances. Administrative controls and PPE should be used in the absence of engineering controls or as supplemental controls where engineering controls are insufficient in reducing specific exposures to an acceptable level.

Eye Protection

Safety glasses with side-shields.

Hand Protection

For operations where prolonged or repeated skin contact may occur, impervious gloves should be worn. The following glove type may be suitable for handling this product: Protective gloves complying with EN 374.

Nitrile rubber

Glove thickness => 0.38 mm Break through time => 480 min

Butyl rubber

Glove thickness => 0.64 mm Break through time => 480 min

Glove material suitability will vary depending on specific use conditions. Consideration should be given to variables such as operational characteristics, anticipated contact time, task requirements and other factors relevant to the selection of PPE. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. Any specific glove information provided is based on published literature and glove manufacturer data. Barrier creams may help to protect the exposed areas of skin. Barrier creams should not be applied after exposure has occurred. Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Skin and body protection

Long sleeved clothing.

Respiratory protection

No special protective equipment required. In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

This information is based on the state in which the specific product is delivered and on the intended use specified within this SDS. This information is provided based on literature reference, manufacturer specifications and recommendations and/or derived by analogy with similar substances. The level of protection and types of exposure controls will vary depending on potential exposure conditions.

Hygiene measures

Regular cleaning of equipment, work area and clothing is recommended.

Environmental Exposure Controls

Do not allow material to contaminate ground water system.

Thermal hazards

None under normal use conditions

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

| | |
|-----------------------|------------------|
| Physical state | Liquid |
| Color | Red clear |
| Odor | Hydrocarbon-like |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|---|---------------------|-------------------------|
| Melting point / freezing point | No data available | |
| Boiling point / boiling range | No data available | |
| Flammability | Ignitable substance | |
| Flammability Limit in Air | | |
| Upper flammability or explosive limits | No data available | |
| Lower flammability or explosive limits | No data available | |
| Flash point | 170 °C / 338 °F | ASTM D 92 |
| Autoignition temperature | No data available | |
| Decomposition temperature | No data available | |
| pH | No data available | |
| Kinematic viscosity | 35.9 cSt @ 40 °C | ASTM D 445 |
| Solubility | Insoluble in water | Soluble in hydrocarbons |
| Partition coefficient | Not applicable | |
| Vapor pressure | No data available | |
| Relative density | 0.87 @ 15 °C | |
| Vapor density | No data available | |
| Particle characteristics | Not applicable | |

9.2. Other information

| | | |
|-------------------------------------|-----------------|------------|
| Viscosity, kinematic (100°C) | 7.4 cSt @ 100°C | ASTM D 445 |
| Pour Point | -45 °C / -49 °F | ASTM D 97 |

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

None under normal use conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal use conditions

10.4. Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition. Extremes of temperature and direct sunlight.

10.5. Incompatible materials

Oxidizing agent.

10.6. Hazardous decomposition products

Thermal decomposition can lead to release of irritating and toxic gases and vapors; Carbon monoxide; Carbon dioxide (CO₂)

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Product Information - Principle Routes of Exposure

| | |
|---------------------|------------|
| Inhalation | None known |
| Eye contact | None known |
| Skin contact | None known |
| Ingestion | None known |

Acute toxicity - Product Information

Product does not present an acute toxicity hazard based on known or supplied information.

Acute toxicity - Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|------------------------|----------------------|-------------------|
| Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C) | >2000 mg/kg | >2000 mg/kg | >5 mg/L |
| Highly refined base oil (Viscosity >20.5 cSt @40°C) | >2000 mg/kg | >2000 mg/kg | >5 mg/L |
| Short-, medium- and long-chain alkyl methacrylates and short-chain alkyl methacrylamide copolymer | >2000 mg/kg (Rat) | | |
| 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol | 1350 mg/kg (Rat) | >2000 mg/kg (Rabbit) | 220 ppm (Rat) 1 h |
| 3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine | 500 - 2000 mg/kg (Rat) | | |

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

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

Sensitization

Respiratory Sensitization Skin sensitization

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

Germ cell mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

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

Specific target organ systemic toxicity (single exposure)

Based on available data, the classification criteria are not met

Specific target organ systemic toxicity (repeated exposure)

Based on available data, the classification criteria are not met

Aspiration hazard

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

11.2. Information on other hazards

Endocrine Disruptor Information None known

Other information No information available

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

| Chemical name | Algae/aquatic plants | Fish | Crustacea |
|---|--|--|-------------------------------------|
| Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C) | >100: 72 h mg/L | >100: 96 h mg/L | >100: 48 h mg/L |
| Highly refined base oil (Viscosity >20.5 cSt @40°C) | >100: 72 h mg/L | >100: 96 h mg/L | >100: 48 h mg/L |
| Short-, medium- and long-chain alkyl methacrylates and short-chain alkyl methacrylamide copolymer | >100: 72 h Pseudokirchneriella subcapitata mg/L EC50 | >100: 96 h Gobiocypris rarus mg/L LC50 | >100: 48 h Daphnia magna mg/L EC50 |
| 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol | 0.0538: 72 h Pseudokirchneriella subcapitata mg/L LC50 | > 0.1: 96 h Danio rerio mg/L LC50 | 0.043: 48 h Daphnia magna mg/L LC50 |
| 3-((C9-11-iso,C10-rich)alkyloxy)propan-1-amine | 0.0544: 72 h Pseudokirchneriella subcapitata mg/L LC50 | 2.14: 96 h Danio rerio mg/L LC50 | 1.05: 48 h Daphnia magna mg/L LC50 |

12.2. Persistence and degradability

The product is not readily biodegradable, but it can be degraded by micro-organisms, it is regarded as being inherently biodegradable.

12.3. Bioaccumulative potential

| Chemical name | Partition coefficient |
|---|-----------------------|
| 2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol | 3.6 |

12.4. Mobility in soil

The product is insoluble and floats on water. Is not likely mobile in the environment due its low water solubility.

12.5. Results of PBT and vPvB assessment

This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT) This preparation contains no substance considered to be very persistent nor very bioaccumulating (vPvB)

12.6. Endocrine Disruptor Information

None known

12.7. Other adverse effects

None known

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues/unused products

Should not be released into the environment. Dispose of in accordance with local regulations.

| | |
|--|--|
| Contaminated packaging | Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not reuse empty containers. Observe all label precautions until container is cleaned, reconditioned or destroyed |
| Waste codes / waste designations according to EWC / AVV | Waste codes should be assigned by the user based on the application for which the product was used. |

SECTION 14: TRANSPORT INFORMATION

14.1. UN-Number

Not regulated

14.2. UN proper shipping name

Not regulated

14.3. Transport hazard class

Not regulated

14.4. Packing Group

Not regulated

14.5. Environmental Hazards

None

14.6. Special precautions for users

None

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

IMDG Not regulated

ADR Not regulated

IATA Not regulated

ADN Not regulated

SECTION 15: REGULATORY INFORMATION

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

EU legislation

The Classification, Labeling and Packaging of Substances and Mixtures (CLP) Regulation (EC 1272/2008)
 Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH) Regulation (EC 1907/2006)
 European Agreement concerning the International Carriage of Dangerous Goods by Road
 Safety Data Sheet according to Regulation EC 1907/2006 (REACH) with its amendment regulation EU 2020/878
 European Agreement concerning the International Carriage of Dangerous Goods by Road/ Regulations concerning the International Carriage of Dangerous Goods by Rail

International Civil Aviation Organization / International Air Transport Association Dangerous Goods Regulation

Substance(s) of Very High Concern

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59).

Authorizations and/or restrictions on use:

This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII). This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV).

National regulations**Germany Water hazard class (WGK)**

Hazard to water/Class 2

Product Registration number

Denmark Registration (DK)

No information available

International Regulations**Ozone-depleting substances (ODS)**

Not applicable

The Stockholm Convention on Persistent Organic Pollutants

Not applicable

The Rotterdam Convention

Not applicable

International Inventories**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

All ingredients are on the inventory or exempt from listing

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

All ingredients are on the inventory or exempt from listing

AICS - Australian Inventory of Chemical Substances

All ingredients are on the inventory or exempt from listing

PICCS - Philippines Inventory of Chemicals and Chemical Substances

Contact supplier for inventory compliance status

KECL - Korean Existing and Evaluated Chemical Substances

Contact supplier for inventory compliance status

IECSC - China Inventory of Existing Chemical Substances

Contact supplier for inventory compliance status

ENCS - Japan Existing and New Chemical Substances

Contact supplier for inventory compliance status

TCSI - Taiwan National Existing Chemical Inventory

Contact supplier for inventory compliance status

NZIoC - New Zealand Inventory of Chemicals

All ingredients are on the inventory or exempt from listing

Other Information

The highly refined base oil (Viscosity >20.5 cSt @40°C) contains one or more substance with the following CAS/EC numbers/REACH registration numbers:

| Chemical name | CAS No | EC No | REACH registration number |
|--|-------------|-----------|---------------------------|
| Lubricating oils (petroleum), C24-50, solvent-extd., dewaxed, hydrogenated | 101316-72-7 | 309-877-7 | 01-2119489969-06-xxxx |
| Distillates (petroleum), solvent-refined heavy paraffinic | 64741-88-4 | 265-090-8 | 01-2119488706-23-xxxx |
| Distillates (petroleum), solvent-refined light paraffinic | 64741-89-5 | 265-091-3 | 01-2119487081-40-xxxx |
| Residual oils (petroleum), solvent deasphalted | 64741-95-3 | 265-096-0 | 01-2119487081-40-xxxx |
| Distillates (petroleum), solvent-refined heavy naphthenic | 64741-96-4 | 265-097-6 | 01-2119483621-38-xxxx |
| Distillates (petroleum), solvent-refined light naphthenic | 64741-97-5 | 265-098-1 | 01-2119480374-36-xxxx |
| Residual oils (petroleum), solvent-refined | 64742-01-4 | 265-101-6 | 01-2119488707-21-xxxx |
| Distillates (petroleum), hydrotreated heavy naphthenic | 64742-52-5 | 265-155-0 | 01-2119467170-45-xxxx |
| Distillates (petroleum), hydrotreated light naphthenic | 64742-53-6 | 265-156-6 | 01-2119480375-34-xxxx |
| Distillates (petroleum), hydrotreated heavy paraffinic | 64742-54-7 | 265-157-1 | 01-2119484627-25-xxxx |
| Distillates (petroleum), hydrotreated light paraffinic | 64742-55-8 | 265-158-7 | 01-2119487077-29-xxxx |
| Distillates (petroleum), solvent-dewaxed light paraffinic | 64742-56-9 | 265-159-2 | 01-2119480132-48-xxxx |
| Residual oils (petroleum), hydrotreated | 64742-57-0 | 265-160-8 | 01-2119489287-22-xxxx |
| Lubricating oils (petroleum), hydrotreated spent | 64742-58-1 | 265-161-3 | |
| Residual oils (petroleum), solvent-dewaxed | 64742-62-7 | 265-166-0 | 01-2119480472-38-xxxx |
| Distillates (petroleum), solvent-dewaxed heavy paraffinic | 64742-65-0 | 265-169-7 | 01-2119471299-27-xxxx |
| Paraffin oils (petroleum), catalytic dewaxed heavy | 64742-70-7 | 265-174-4 | 01-2119487080-42-xxxx |
| Paraffin oils (petroleum), catalytic dewaxed light | 64742-71-8 | 265-176-5 | 01-2119485040-48-xxxx |
| Lubricating oils (petroleum), C>25, hydrotreated bright stock-based | 72623-83-7 | 276-735-8 | |
| Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, high-viscosity | 72623-85-9 | 276-736-3 | 01-2119555262-43-xxxx |
| Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based | 72623-86-0 | 276-737-9 | 01-2119474878-16-xxxx |
| Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based | 72623-87-1 | 276-738-4 | 01-2119474889-13-xxxx |
| Lubricating oils | 74869-22-0 | 278-012-2 | 01-2119495601-36-xxxx |
| White mineral oil (petroleum) | 8042-47-5 | 232-455-8 | |

The highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C) contains one or more substance with the following CAS/EC numbers/REACH registration numbers:

| Chemical name | CAS No | EC No | REACH registration number |
|---|------------|-----------|---------------------------|
| Distillates (petroleum), heavy hydrocracked | 64741-76-0 | 265-077-7 | 01-2119486951-26-xxxx |
| Distillates (petroleum), solvent-refined heavy paraffinic | 64741-88-4 | 265-090-8 | 01-2119488706-23-xxxx |
| Distillates (petroleum), solvent-refined light paraffinic | 64741-89-5 | 265-091-3 | 01-2119487067-30-xxxx |
| Residual oils (petroleum), solvent deasphalted | 64741-95-3 | 265-096-0 | 01-2119487081-40-xxxx |
| Distillates (petroleum), solvent-refined heavy naphthenic | 64741-96-4 | 265-097-6 | 01-2119483621-38-xxxx |
| Distillates (petroleum), solvent-refined light naphthenic | 64741-97-5 | 265-098-1 | 01-2119480374-36-xxxx |
| Residual oils (petroleum), solvent-refined | 64742-01-4 | 265-101-6 | 01-2119488707-21-xxxx |
| Distillates (petroleum), hydrotreated heavy naphthenic | 64742-52-5 | 265-155-0 | 01-2119467170-45-xxxx |
| Distillates (petroleum), hydrotreated light naphthenic | 64742-53-6 | 265-156-6 | 01-2119480375-34-xxxx |
| Distillates (petroleum), hydrotreated heavy paraffinic | 64742-54-7 | 265-157-1 | 01-2119484627-25-xxxx |
| Distillates (petroleum), hydrotreated light paraffinic | 64742-55-8 | 265-158-7 | 01-2119487077-29-xxxx |
| Distillates (petroleum), solvent-dewaxed light paraffinic | 64742-56-9 | 265-159-2 | 01-2119480132-48-xxxx |
| Residual oils (petroleum), hydrotreated | 64742-57-0 | 265-160-8 | 01-2119489287-22-xxxx |
| Lubricating oils (petroleum), hydrotreated spent | 64742-58-1 | 265-161-3 | |
| Residual oils (petroleum), solvent-dewaxed | 64742-62-7 | 265-166-0 | 01-2119480472-38-xxxx |
| Distillates (petroleum), solvent-dewaxed heavy paraffinic | 64742-65-0 | 265-169-7 | 01-2119471299-27-xxxx |
| Paraffin oils (petroleum), catalytic dewaxed heavy | 64742-70-7 | 265-174-4 | 01-2119487080-42-xxxx |
| Paraffin oils (petroleum), catalytic dewaxed light | 64742-71-8 | 265-176-5 | 01-2119485040-48-xxxx |

| | | | |
|--|------------|-----------|-----------------------|
| Dec-1-ene, homopolymer, hydrogenated | 68037-01-4 | 500-183-1 | 01-2119486452-34-xxxx |
| Lubricating oils (petroleum), C>25, hydrotreated bright stock-based | 72623-83-7 | 276-735-8 | |
| Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, high-viscosity | 72623-85-9 | 276-736-3 | 01-2119555262-43-xxxx |
| Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based | 72623-86-0 | 276-737-9 | 01-2119474878-16-xxxx |
| Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based | 72623-87-1 | 276-738-4 | 01-2119474889-13-xxxx |
| Lubricating oils | 74869-22-0 | 278-012-2 | 01-2119495601-36-xxxx |

15.2. Chemical Safety Assessment

A chemical safety assessment according to regulation (EC) No. 1907/2006 is not required

SECTION 16: OTHER INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet

Repr.-Reproduction toxicity
 Asp. Tox. - Aspiration Toxicity
 Acute Tox. - Acute Toxicity
 Aquatic Acute - Acute Aquatic Toxicity
 Aquatic Chronic - Chronic Aquatic Toxicity
 Eye Dam. - Eye Damage
 Eye Irrit. - Eye Irritation
 Skin Corr. - Skin Corrosion
 Skin Irrit. - Skin Irritation
 Skin Sens. - Skin Sensitizer
 Resp. Sens. - Respiratory Sensitizer
 STOT SE - Specific target organ systemic toxicity (Single exposure)
 STOT RE - Specific target organ systemic toxicity (repeated exposure)
 VOC - Volatile organic compounds

Full text of H-Statements referred to under section 3

EUH066 - Repeated exposure may cause skin dryness or cracking
 H302 - Harmful if swallowed
 H304 - May be fatal if swallowed and enters airways
 H314 - Causes severe skin burns and eye damage
 H317 - May cause an allergic skin reaction
 H318 - Causes serious eye damage
 H319 - Causes serious eye irritation
 H400 - Very toxic to aquatic life
 H410 - Very toxic to aquatic life with long lasting effects

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 EPA (Environmental Protection Agency)
 Acute Exposure Guideline Level(s) (AEGL(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 Japan GHS Classification
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
RTECS (Registry of Toxic Effects of Chemical Substances)
World Health Organization

Classification for mixtures and used evaluation method according to regulation (EC) 1207/2008 [CLP]

| | |
|------------------------------|-----------------------|
| Physical hazards | On basis of test data |
| Health Hazards | Calculation Method |
| Environmental Hazards | Calculation Method |

Revision Date 05-20-2022

Revision Note This SDS has been revised in the following section(s), 9.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.