



SAFETY DATA SHEET

according to Regulation (EU) 2020/878

Page 1/9

STAR MARINER MGO ANTIGEL

Revision 9
Revision date 2022-11-29

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

1.1. Product identifier

Product name	STAR MARINER MGO ANTIGEL
--------------	--------------------------

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

Product Use	[SU22] Professional uses: Public domain (administration, education, entertainment, services, craftsmen); ----- [SU3] Industrial uses: Uses of substances as such or in preparations at industrial sites;
Description	Winter Diesel Cold Flow Improver Fuel Additive.

1.3. Details of the supplier of the safety data sheet

Company	Star International
Address	Star House Turbine Industrial Park Turbine Road Birkenhead U.K CH41 9BA
Web	www.star-international.co.uk
Telephone	+44 (0)1244 504500
Fax	+44 (0)1244 504509
Email	enquiries@star-international.co.uk
Email address of the competent person	Jeff.Antley@star-international.co.uk

1.4. Emergency telephone number

Emergency telephone number	07511 991338 available 24 hours For medical advice or information you should contact your GP or NHS 111 (or NHS 24 in Scotland) on 111 (for 24 hour health advice) If you are a healthcare professional with an enquiry please visit www.TOXBASE.org
----------------------------	--

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture


2.1.2. Classification - EC 1272/2008	: EUH066; Asp. Tox. 1: H304; Aquatic Chronic 3: H412;
--------------------------------------	---

2.2. Label elements

STAR MARINER MGO ANTIGEL

Revision 9
Revision date 2022-11-29

2.2. Label elements

Hazard pictograms	
Signal Word	Danger
Hazard Statement	EUH066 - Repeated exposure may cause skin dryness or cracking. Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways. Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.
Precautionary Statement: Prevention	P201 - Obtain special instructions before use. P280 - Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary Statement: Response	P301+P310+P330+P331 - IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth. Do NOT induce vomiting. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Precautionary Statement: Storage	P405 - Store locked up.
Precautionary Statement: Disposal	P501 - Dispose of contents/container to an approved disposal site, in accordance with local regulations.
SUPPLEMENTAL HAZARD INFORMATION	Contains - Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics, Hydrocarbons, C10, aromatics, <1% naphthalene (Solvent naphtha (Petroleum), heavy atom], Naphthalene.

2.3. Other hazards

Other hazards	This substance/mixture is not classified as PBT or vPvB according to current criteria. The substance/mixture does not contain substances with endocrine disrupting properties.
---------------	--

Further information

	RECOMMENDED SHELF LIFE 1 YEAR FROM DATE OF DELIVERY.
--	--

SECTION 3: Composition/information on ingredients

3.2. Mixtures

EC 1272/2008

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics			926-141-6	01-2119456620-43	60 - 70%	: EUH066; Asp. Tox. 1: H304;
Hydrocarbons, C10, aromatics, <1% naphthalene [Solvent naphtha (Petroleum), heavy arom]		64742-94-5	918-811-1		10 - 20%	: EUH066; Asp. Tox. 1: H304; STOT SE 3: H336; Aquatic Chronic 2: H411;
naphthalene (Naphthalene)	601-052-00-2	91-20-3	202-049-5		0 - 0.5%	Carc. 2: H351; Acute Tox. 4: H302; Aquatic Acute 1: H400; Aquatic Chronic 1: H410;

naphthalene, CAS No. 91-20-3 - M Factor (Acute/Chronic) = 1.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move the exposed person to fresh air.
Eye contact	Rinse immediately with plenty of water. Contact lenses should be removed.
Skin contact	Remove contaminated clothing. Wash with water and soap as a precaution.
Ingestion	DO NOT INDUCE VOMITING. Rinse mouth thoroughly.

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

Inhalation	May cause irritation to respiratory system.
Eye contact	May cause irritation to eyes.

STAR MARINER MGO ANTIGEL

Revision 9

Revision date 2022-11-29

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

Skin contact	May cause irritation to skin. Repeated exposure may cause skin dryness or cracking.
Ingestion	May be fatal if swallowed and enters airways.

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

Inhalation	Move the exposed person to fresh air. Seek medical attention. Show this safety data sheet to the doctor in attendance.
Eye contact	Contact lenses should be removed. Rinse immediately with plenty of water. Seek medical attention. Show this safety data sheet to the doctor in attendance.
Skin contact	Remove contaminated clothing. Seek medical attention. Show this safety data sheet to the doctor in attendance.
Ingestion	If swallowed, seek medical advice immediately and show this container or label. Show this safety data sheet to the doctor in attendance.

General information

	If you feel unwell, seek medical advice (show the label where possible). Treat symptomatically.
--	---

SECTION 5: Firefighting measures**5.1. Extinguishing media**

	This product is not flammable . Use fire-extinguishing media appropriate for surrounding materials.
--	---

5.2. Special hazards arising from the substance or mixture

	None known.
--	-------------

5.3. Advice for firefighters

	Fire fighters should wear self contained positive pressure breathing apparatus (SCBA) and full turnout gear.
--	--

Further information

	In the event of a fire and/or explosion do not breath fumes. Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
--	---

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

	Wear suitable protective equipment.
--	-------------------------------------

6.2. Environmental precautions

	Advise local authorities if large spills cannot be contained.
--	---

6.3. Methods and material for containment and cleaning up

	For large spills: Absorb with inert, absorbent material. Sweep up. Transfer to suitable, labelled containers for disposal. Clean spillage area thoroughly with plenty of water. For small spills: Flush down the drain with plenty of water.
--	--

6.4. Reference to other sections

	See section 2, 7, 8, 13 for further information.
--	--

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

	Avoid contact with eyes and skin. Do not breathe vapours or spray mist. Adopt best Manual Handling considerations when handling, carrying and dispensing.
--	---

7.2. Conditions for safe storage, including any incompatibilities

	Store in a cool, dry area. Keep container tightly closed. Keep out of the reach of children. Store in original container.
--	---

7.3. Specific end use(s)

STAR MARINER MGO ANTIGEL

Revision 9

Revision date 2022-11-29

7.3. Specific end use(s)

Winter Diesel Cold Flow Improver Fuel Additive.

Suitable packaging

Plastic containers.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure controls.

8.1.1. Exposure Limit Values

1,2,4-trimethylbenzene	DIR: 2017/164 8hTWA ppm: 20 STEL ppm: -	8hTWA mg/m ³ : 100 STEL mg/m ³ : - NOT: -
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	WEL 8-hr limit ppm: WEL 15 min limit ppm: WEL 8-hr limit mg/m ³ total - inhalable dust: WEL 8-hr limit mg/m ³ total - respirable dust:	WEL 8-hr limit mg/m ³ : 1200 WEL 15 min limit mg/m ³ : WEL 15 min limit mg/m ³ total - inhalable dust: WEL 15 min limit mg/m ³ total - respirable dust:

DNEL: Derived no-effect level.

Exposure Pattern - Workers

1,2,4-trimethylbenzene	Acute inhalation - Systemic effects 100 mg/m ³ Acute inhalation - Local effects 100 mg/m ³ Long-term - inhalation - Local effects 100 mg/m ³	Long-term - inhalation - Systemic effects 100 mg/m ³ Long-term - dermal - Systemic effects 16171 mg/kg
Hydrocarbons, C10, aromatics, <1% naphthalene [Solvent naphtha (Petroleum), heavy arom]	Long-term - inhalation - Systemic effects 151 mg/m ³ Long-term - dermal - Systemic effects 12.5 mg/kg	

Exposure Pattern - General population

1,2,4-trimethylbenzene	Acute inhalation - Systemic effects 29.4 mg/m ³ Acute inhalation - Local effects 29.4 mg/m ³ Long-term - inhalation - Local effects 29.4 mg/m ³ Long-term - oral - Systemic effects 15 mg/kg	Long-term - inhalation - Systemic effects 29.4 mg/m ³ Long-term - dermal - Systemic effects 9512 mg/kg
Hydrocarbons, C10, aromatics, <1% naphthalene [Solvent naphtha (Petroleum), heavy arom]	Long-term - inhalation - Systemic effects 32 mg/m ³ Long-term - dermal - Systemic effects 7.5 mg/kg	Long-term - oral - Systemic effects 2.1 mg/kg


8.2. Exposure controls

STAR MARINER MGO ANTIGEL

Revision 9

Revision date 2022-11-29

8.2. Exposure controls

	
	Adopt best Manual Handling considerations when handling, carrying and dispensing. Avoid contact with skin and eyes. Handle in accordance with good industrial hygiene and safety practice. Use appropriate personal protective equipment. Wear suitable protective clothing and eye/face protection.
8.2.1. Appropriate engineering controls	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective threshold limit value. Ensure eyewash stations and safety showers are close to the workstation location.
Eye / face protection	Avoid contact with eyes. If splashes are likely to occur, wear: safety glasses with side-shields. Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Wear chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.
Skin protection - Handprotection	Rubber gloves. Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer.
Skin protection - Other	Wear suitable protective clothing.
Respiratory protection	No personal respiratory protective equipment normally required. In case of insufficient ventilation wear suitable respiratory equipment.
8.2.3. Environmental exposure controls	Prevent further leakage or spillage if safe to do so.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Amber
Odour	Characteristic
Odour threshold	No data available
pH	No data available
Melting point	No data available
Initial boiling point	240 °C
Flash point	70 °C
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Vapour pressure	No data available
Relative Vapour Density	No data available
Density / Relative Density	0.818 - 0.83 g/cm ³
Partition coefficient	No data available
Autoignition temperature	> 200 °C
Viscosity	No data available
Explosive properties	No data available
Oxidising properties	No data available
Solubility	Immiscible in water

9.2. Other information

STAR MARINER MGO ANTIGEL

Revision 9
Revision date 2022-11-29

9.2. Other information

Conductivity	No data available
Surface tension	No data available
Gas group	No data available
Benzene Content	No data available
Lead content	No data available
VOC (Volatile organic compounds)	No data available

9.2.1. Information with regard to physical hazard classes

No data is available on this product.

9.2.2. Other safety characteristics

No data is available on this product.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Protect from frost. Avoid excessive heat for prolonged periods of time. Avoid storing in direct Sun Light.

10.5. Incompatible materials

Strong acids. Strong oxidising agents.

10.6. Hazardous decomposition products

No Hazardous decomposition products when stored and handled correctly.

SECTION 11: Toxicological information

11.1 Information on hazard classes

Acute toxicity	This mixture has not been tested as a whole for health effects. The health effects have been calculated using the methods outlined in Regulation (EC) No 1272/2008 (CLP).
	based on available data the classification criteria are not met.
	Oral ATE = >10,000 mg/kg. Inhalation - Dust/Mist ATE = 172.8111 mg/l.
Skin corrosion/irritation	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 or skin sensitisation	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.
STOT-single exposure	based on available data the classification criteria are not met.
STOT-repeated exposure	based on available data the classification criteria are not met.
Aspiration hazard	Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways.
Repeated or prolonged exposure	Repeated exposure may cause skin dryness or cracking.

STAR MARINER MGO ANTIGEL

Revision 9

Revision date 2022-11-29

11.1.2. Mixtures

No data available.

11.1.3. Hazard Information

No data available.

11.1.4. Toxicological Information

Hydrocarbons, C10 , aromatics, <1% naphthalene [Solvent naphtha (Petroleum), heavy arom]	Dermal Rabbit LD50: 2000 mg/kg	Inhalation Rat LC50/4 h: >590 mg/m3
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Inhalation Rat LC50/8 h: >5000 mg/l	Oral Rat LD50: >5000mg/kg
	Dermal Rabbit LD50: >5000mg/kg	Inhalation Rat LC50/4 h: >20 mg/l

11.2 Information on other hazards

No data is available on this product.

SECTION 12: Ecological information

12.1. Toxicity

1,2,4-trimethylbenzene	Fish LC50/96h: 7.7200 mg/l	
Hydrocarbons, C10 , aromatics, <1% naphthalene [Solvent naphtha (Petroleum), heavy arom]	Daphnia EC50/48h: 3.0000 mg/l	Algae EC50/72h: 1 - 3 mg/l
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Daphnia EC50/48h: 1000.0000 mg/l	Fish LC50/96h: 1000.0000 mg/l
	Algae EC50/72h: 1000 mg/l	

12.2. Persistence and degradability

Substance biodegrades at a moderate rate and inherently biodegradable according to the OECD guide lines.

12.3. Bioaccumulative potential

The product is not bioaccumulating.

Partition coefficient

STAR MARINER MGO ANTIGEL No data available

12.4. Mobility in soil

Slightly miscible in water.

12.5. Results of PBT and vPvB assessment

This substance/mixture is not classified as PBT or vPvB according to current criteria.

12.6 Endocrine disrupting properties

No data is available on this product.

12.7. Other adverse effects

No data is available on this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements.

STAR MARINER MGO ANTIGEL

Revision 9

Revision date 2022-11-29

General information	
	Dispose of in compliance with all local and national requirements.

Disposal of packaging	
	Do NOT reuse empty containers. Empty containers can be sent to landfill after cleaning, if in compliance with local and national regulations.

SECTION 14: Transport information

14.1. UN number	
	The product is not classified as dangerous for carriage.

14.2. UN proper shipping name	
	The product is not classified as dangerous for carriage.

14.3. Transport hazard class(es)	
	The product is not classified as dangerous for carriage.

14.4. Packing group	
	The product is not classified as dangerous for carriage.

14.5. Environmental hazards	
	The product is not classified as dangerous for carriage.

14.6. Special precautions for user	
	The product is not classified as dangerous for carriage.

14.7 Maritime Transport in bulk according to IMO instruments	
	The product is not classified as dangerous for carriage.

SECTION 15: Regulatory information

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

Regulations	<p>REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.</p> <p>COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.</p> <p>COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).</p>
--------------------	--

15.2. Chemical safety assessment	
	No information available.

SECTION 16: Other information

Other information	
Revision	This document differs from the previous version in the following areas:. 2 - Other hazards. 2 - Further information. 2 - SUPPLEMENTAL HAZARD INFORMATION.

STAR MARINER MGO ANTIGEL

Revision 9

Revision date 2022-11-29

Other information

	<p>9 - 9.2.2. Other safety characteristics. 9 - 9.2.1. Information with regard to physical hazard classes. 11 - 11.2 Information on other hazards. 12 - 12.6 Endocrine disrupting properties. 12 - 12.7. Other adverse effects. 15 - Regulations.</p>
Data sources	<p>Classification and Procedure used to derive the classification for mixtures according to Regulation (EC) No. 1272/2008, as retained and amended in UK law. Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways. - Calculation Method. Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects. - Calculation Method.</p>
Text of Hazard Statements in Section 3	<p>EUH066 - Repeated exposure may cause skin dryness or cracking. Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways. STOT SE 3: H336 - May cause drowsiness or dizziness. Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects. Acute Tox. 4: H302 - Harmful if swallowed. Carc. 2: H351 - Suspected of causing cancer . Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects.</p>

Further information

	<p>The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This 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 other process.</p>
--	---