



SAFETY DATA SHEET

according to Regulation (EU) 2020/878

Star Mariner Eliminator
Product code: 00920055

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Revision 7
Revision date 2023-07-14

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

1.1. Product identifier

Product name	Star Mariner Eliminator
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1.2. Relevant identified uses of the substance or mixture and uses advised against

Product Use	[SU3] Industrial uses: Uses of substances as such or in preparations at industrial sites; [SU1] Agriculture, forestry, fishery;
Description	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	matthew.ball@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
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

2.1.2. Classification - EC 1272/2008	Skin Corr. 1B: H314; Skin Sens. 1: H317; Aquatic Chronic 1: H410;
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2.2. Label elements

Hazard pictograms	
Signal Word	Danger

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2.2. Label elements

Hazard Statement	Skin Corr. 1B: H314 - Causes severe skin burns and eye damage. Skin Sens. 1: H317 - May cause an allergic skin reaction. Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects.
Precautionary Statement: Prevention	P280 - Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary Statement: Response	P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P337+P313 - If eye irritation persists: Get medical advice/attention.
Precautionary Statement: Disposal	P501 - Dispose of contents/container to an approved disposal site, in accordance with local regulations.
SUPPLEMENTAL HAZARD INFORMATION	Contains - Sodium Nitrate, reaction mass of: 5-chloro-2-methyl-4-iso-thiazolin-3-one (EC No. 247-500-7) and 2-methyl-2H-isothiazol-3-one (EC No. 220-239-6).

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.
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Further information

	RECOMMENDED SHELF LIFE 1 YEAR FROM DATE OF DELIVERY.
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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
reaction mass of: 5-CHLORO-2-METHYL-4-ISOTHIAZOL-3-ONE (EC No. 247-500-7) and 2-METHYL-2H-ISOTHIAZOL-3-ONE (EC No. 220-239-6)		55965-84-9	611-341-5		1 - 10%	Acute Tox. 3: H301+H311; Skin Corr. 1B: H314; Skin Sens. 1: H317; Acute Tox. 2: H330; Aquatic Acute 1: H400; Aquatic Chronic 1: H410;
Sodium Nitrate		7631-99-4		01-2119488221-41	1 - 10%	Ox. Sol. 2: H272; Eye Irrit. 2: H319;

reaction mass of: 5-chloro-2-methyl-4-iso-thiazolin-3-one (EC No. 247-500-7) and 2-methyl-2H-isothiazol-3-one (EC No. 220-239-6) - M Factor (Acute) = 100, M Factor (Chronic) = 10.

Acute Toxicity Estimate Dermal (mg/kg) - 2820.
Acute Toxicity Estimate Oral (mg/kg) - 4400.
Acute Toxicity Estimate Inhalation - Dust/Mist (mg/l) - 11.2.

CAS No. of the single components of the reaction mixture are - CIT: 26172-55-4, MIT: 2682-20-4.

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 for 15 minutes holding the eyelids open. Contact lenses should be removed.
Skin contact	Remove contaminated clothing. Wash off immediately with plenty of soap and water.
Ingestion	DO NOT INDUCE VOMITING. Rinse mouth thoroughly. Drink plenty of water to dilute ingested product.

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

Inhalation	May be harmful if inhaled.
Eye contact	Causes burns. Risk of serious damage to eyes. May cause an allergic skin reaction. Skin reaction like itching, reddening, blistering may appear hours after contact.
Skin contact	Causes burns.
Ingestion	May be harmful if swallowed.

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

Inhalation	Move the exposed person to fresh air. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Seek medical attention. Show this safety data sheet to the doctor in attendance.
Eye contact	Rinse immediately with plenty of water for 15 minutes holding the eyelids open. Contact lenses should be removed. Seek medical attention. Show this safety data sheet to the doctor in attendance.
Skin contact	Remove contaminated clothing immediately. Rinse immediately with plenty of water. Seek medical attention. Show this safety data sheet to the doctor in attendance.
Ingestion	Drink 1 to 2 glasses of water. Seek medical attention. 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.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

	This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials. In case of fire, use water jet spray, extinguishing powder, Carbon dioxide (CO ₂), foam.
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5.2. Special hazards arising from the substance or mixture

	In case of fire, toxic incineration products may be released, such as: , Nitrogen oxides (NO _x), Sulphur dioxide (SO ₂), Carbon monoxide (CO), Hydrogen chloride (HCl).
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5.3. Advice for firefighters

	Fire fighters should wear self contained positive pressure breathing apparatus (SCBA) and full turnout gear.
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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.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

	Wear suitable protective equipment. Avoid contact with eyes and skin.
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6.2. Environmental precautions

	Advise local authorities if large spills cannot be contained.
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6.3. Methods and material for containment and cleaning up

	Absorb with inert, absorbent material. Sweep up. Transfer to suitable, labelled containers for disposal. Clean spillage area thoroughly with plenty of water.
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6.4. Reference to other sections

	See section 2, 7, 8, 13 for further information.
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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
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7.1. Precautions for safe handling

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)

Fuel Additive.

Suitable packaging

Plastic containers.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure controls.
No workplace exposure limits applicable.

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

Wear 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: 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 Respiratory protection

Wear suitable protective clothing.

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

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9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Colourless/Light yellow
Odour	Mild
Odour threshold	No data available
pH	3 - 4
Melting point	No data available
Initial boiling point	100 °C
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Vapour pressure	23 mbar (water) @ 20 degC
Relative Vapour Density	No data available
Density / Relative Density	1.015 - 1.035 (H2O = 1 @ 20 °C)
Partition coefficient	No data available
Autoignition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidising properties	No data available
Solubility	Soluble in water

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.
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9.2.2. Other safety characteristics

	No data is available on this product.
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SECTION 10: Stability and reactivity

10.1. Reactivity

	Stable under normal conditions.
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10.2. Chemical stability

	Stable under normal conditions.
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10.3. Possibility of hazardous reactions

	None known.
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10.4. Conditions to avoid

	None known.
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10.5. Incompatible materials

	Alkalis (Lyes), Reducing agents, Strong oxidising agents.
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10.6. Hazardous decomposition products

	No Hazardous decomposition products when stored and handled correctly.
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SECTION 11: Toxicological information

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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 = 4400 mg/kg. Dermal ATE = 2820 mg/kg. Inhalation - Dust/Mist ATE = 11.2 mg/l.
Skin corrosion/irritation	Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.
Serious eye damage/irritation	Causes serious eye damage.
Respiratory or skin sensitisation	Skin Sens. 1: H317 - May cause an allergic skin reaction.
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	based on available data the classification criteria are not met.
Repeated or prolonged exposure	based on available data the classification criteria are not met.

11.1.2. Mixtures

	No data available.
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11.1.3. Hazard Information

	No data available.
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11.1.4. Toxicological Information

Star Mariner Eliminator	Dermal Rat LD50: 2820 mg/kg Inhalation Rat LC50/4 h: 11.2 mg/l	Oral Rat LD50: 4400 mg/kg
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11.2 Information on other hazards

	No data is available on this product.
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SECTION 12: Ecological information

12.1. Toxicity

	No data available
reaction mass of: 5-CHLORO-2-METHYL-4-ISOTHIAZOL-3-ONE (EC No. 247-500-7) and 2-METHYL-2H-ISOTHIAZOL-3-ONE (EC No. 220-239-6)	NOEC / EC10 for marine or freshwater organisms 0.0006 mg/l

12.2. Persistence and degradability

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

	No data is available on this product.
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Partition coefficient

	Star Mariner Eliminator No data available
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12.4. Mobility in soil

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12.4. Mobility in soil

No data is available on this product.

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.

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

Hazard pictograms



14.1. UN number

UN3265

14.2. UN proper shipping name

CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. ((reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one (EC No. 247-500-7) and 2-methyl-2H-isothiazol-3-one (EC No. 220-239-6))

14.3. Transport hazard class(es)

ADR/RID	8
Subsidiary risk	-
IMDG	8
Subsidiary risk	-
IATA	8
Subsidiary risk	-

14.4. Packing group

Packing group III

14.5. Environmental hazards

Environmental hazards	Yes
Marine pollutant	Yes

14.6. Special precautions for user

No additional special precautions.

14.7 Maritime Transport in bulk according to IMO instruments

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14.7 Maritime Transport in bulk according to IMO instruments

Not applicable.

ADR/RID

Hazard ID	80
Tunnel Category	(E)

IMDG

EmS Code	F-A S-B
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IATA

Packing Instruction (Cargo)	856
Maximum quantity	60 L
Packing Instruction (Passenger)	852
Maximum quantity	5 L

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>
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15.2. Chemical safety assessment

No information available.

SECTION 16: Other information

Other information

Revision	<p>This document differs from the previous version in the following areas:.</p> <ul style="list-style-type: none"> 2 - 2.1. Classification of the substance or mixture. 2 - 2.1.2. Classification - EC 1272/2008. 2 - Precautionary Statement: Prevention. 2 - Precautionary Statement: Response. 2 - Precautionary Statement: Storage. 2 - SUPPLEMENTAL HAZARD INFORMATION. 3 - 3.2. Mixtures. 4 - Inhalation. 4 - Eye contact. 4 - Ingestion. 5 - 5.1. Extinguishing media. 5 - 5.2. Special hazards arising from the substance or mixture. 6 - 6.3. Methods and material for containment and cleaning up. 9 - 9.1. Information on basic physical and chemical properties (Colour).
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Other information

	<p>9 - 9.1. Information on basic physical and chemical properties (Odour). 9 - 9.1. Information on basic physical and chemical properties (PH). 9 - 9.1. Information on basic physical and chemical properties (Initial boiling point). 9 - 9.1. Information on basic physical and chemical properties (Melting point). 9 - 9.1. Information on basic physical and chemical properties (Vapour pressure). 9 - 9.1. Information on basic physical and chemical properties (Density / Relative Density). 9 - 9.1. Information on basic physical and chemical properties (Viscosity). 9 - 9.1. Information on basic physical and chemical properties (Partition coefficient (n-octanol/water)). 10 - 10.5. Incompatible materials. 11 - 11.1.4. Toxicological Information. 11 - Acute toxicity. 12 - 12.1. Toxicity. 12 - 12.4. Mobility in soil. 14 - ADR/RID. 16 - Data sources.</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. Skin Corr. 1B: H314 - Causes severe skin burns and eye damage. - Calculation Method. Skin Sens. 1: H317 - May cause an allergic skin reaction. - Calculation Method.</p>
Text of Hazard Statements in Section 3	<p>Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects. - Calculation Method. Acute Tox. 3: H301+H311 - Toxic if swallowed or in contact with skin Skin Corr. 1B: H314 - Causes severe skin burns and eye damage. Skin Sens. 1: H317 - May cause an allergic skin reaction. Acute Tox. 2: H330 - Fatal if inhaled. Aquatic Acute 1: H400 - Very toxic to aquatic life. Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects. Ox. Sol. 2: H272 - May intensify fire; oxidiser. Eye Irrit. 2: H319 - Causes serious eye irritation.</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>