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

1.1. Product identifier

Product name : STAR BRITE BOAT BOTTOM CLEANER
Product code : 922XX

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

Application : SU21 Consumer product. PC35 Cleaning agent. Boat maintenance.

1.3. Details of the supplier of the safety data sheet

Supplier : Star Brite Europe Inc.
86 bis route de Brignais
69630 Chaponost, France
Telephone : +33-478-56-77-80
Fax : +33-472-39-97-96
E-mail : jp.kitzinger@starbrite-europe.com
Website : www.starbrite.com

1.4. Emergency telephone number

EMERGENCY TELEPHONE NUMBER, for DOCTORS/FIRE BRIGADE/POLICE only:
FR - Telephone : +33-478-56-77-80 (During office hours only)

EMERGENCY TELEPHONE NUMBER (for DOCTORS only):
National Poisons Information Service +44-844 892 0111 (24/7)

SECTION 2 HAZARDS IDENTIFICATION *

2.1. Classification of the substance or mixture

CLP classification (1272/2008/EC) : Skin corrosive, category 1C. Corrosive to metals, hazard category 1.

Human health hazards : Causes severe skin burns and eye damage.
Physical/chemical hazards : Reacts vigorously in contact with alkalines. Strong heat development possible. May be corrosive to metals.
Environmental hazards : Not classified as dangerous according to statutory EC-Directives.
Other information : Keep locked up and out of the reach of children. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Do not breathe spray. Use only in well-ventilated areas.

2.2. Label elements

Label elements (1272/2008/EC):
Hazard pictograms :

Signal word : Danger

H- and P-phrases :

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.

P260 aerosol	Do not breathe spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
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.
P310	Immediately call a POISON CENTER/doctor.
P363	Wash contaminated clothing before reuse.
P405	Store locked up.
P234	Keep only in original container.
P390	Absorb spillage to prevent material damage.
P501	Dispose of contents/container to an official chemical waste depot.

Additional labelling (99/45/EC and/or 1272/2008/EC)

: Where the mixture is labelled in accordance with Regulation (EC) No 1272/2008 (CLP) the packaging shall (also) carry the text: Contains: Hydrochloric acid 8 % , Oxalic acid .

: 3 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity.

Other information : According to directive 99/45/EC, the packaging of this product shall carry a tactile warning of danger and a child resistant closure. According to regulation (EC) 1272/2008, Annex II, part 3, the packaging of this product shall carry a tactile warning of danger and a child-resistant fastening.

2.3. Other hazards

Other information : Does not contain PBT or vPvB substances.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS *

3.2. Mixtures

Product description : Mixture.

Information on hazardous substances:

Substance name	Concentration (w/w) (%)	CAS nr.	EC number	Remark	REACH nr.
Hydrochloric acid	5 - < 10	7647-01-0	231-595-7		
Oxalic acid	1 - < 5	144-62-7	205-634-3		

Occupational exposure limit(s), if relevant, are listed in section 8.

Substance name	Hazard Class	H-phrases	Pictograms	
Hydrochloric acid	Skin Corr. 1B; STOT SE 3; Met. Corr. 1	H314; H335; H290	GHS05; GHS07	H290 : C ≥ 0.1 % H319 : C ≥ 10 % H335 : C ≥ 10 % H315 : C ≥ 10 % H314 B : C ≥ 25 %
Oxalic acid	Acute Tox. 4; Eye Dam. 1	H302; H312; H318	GHS05; GHS07	

Reference is made to chapter 16 for full text of each relevant H phrase.

SECTION 4 FIRST-AID MEASURES

4.1. Description of first aid measures

First aid measures

Inhalation : Move victim into fresh air. Apply artificial respiration or supply oxygen if needed. Transport to a hospital immediately.

Skin contact	:	Immediately wash off skin with plenty of water. Take off contaminated clothing. Consult a doctor in case burns or irritation occur.
Eye contact	:	Wash out with (lukewarm) water for at least 15 minutes. Remove contact lenses. Transport to a hospital immediately.
Ingestion	:	Do not induce vomiting. Rinse the mouth, give 1 glass of water at most. Do not give milk. Never give anything by mouth to an unconscious person. Transport to a hospital immediately.

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

Effects and symptoms

Inhalation	:	Corrosive. May cause sore throat and coughing. May cause shortness of breath or lack of breath.
Skin contact	:	Corrosive. May cause redness, pain and severe burns (blisters).
Eye contact	:	Corrosive. May cause redness and severe pain. Tears.
Ingestion	:	Corrosive. May cause burning pain in throat and mouth. May cause a feeling of sickness, stomachache, vomiting and diarrhoea.

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

Note to physicians : None known.

SECTION 5 FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Suitable	:	Carbondioxide (CO_2). Foam. Dry chemical. Water fog.
Not suitable	:	None known.

5.2. Special hazards arising from the substance or mixture

Special exposure hazards	:	None known.
Hazardous thermal decomposition products	:	Carbon monoxide may be evolved if incomplete combustion occurs.

5.3. Advice for firefighters

Special protective equipment for fire-fighters : Use adequate respiratory equipment in case of insufficient ventilation.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions : Danger of slipping. Clean up spills immediately. Wear shoes with non-slip soles. Avoid contact with spilled or released material.

6.2. Environmental precautions

Environmental precautions	:	Avoid release of product into sewers, surface water and/or ground water. In case of large spills: contain with dike. Large scale discharge causing a very low pH may impair the biological system in sewage plants. Inform the official bodies if necessary.
Other information	:	Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Collect spilled material in containers. Carefully neutralise residues with soda. Absorb residues in sand or other inert material. Dispose at an authorised waste collection point. Wash away remainder with plenty of water.

6.4. Reference to other sections

Reference to other sections : See also section 8.

SECTION 7 HANDLING AND STORAGE *

7.1. Precautions for safe handling

Handling : Handle in accordance with good occupational hygiene and safety practices in well-ventilated areas. When dissolving or diluting, always add product to water. NEVER vice versa. Do not breathe spray. Do not breathe vapour. Avoid contact with skin and eyes. Avoid splashing. Wear protective clothing.

7.2. Conditions for safe storage, including any incompatibilities

Storage : Keep frost-free, in a cool, dry and well-ventilated place (< 35 °C). Keep away from oxidizing agents. Keep away from food, drink and animal feedingstuffs.

Recommended packaging : Keep only in the original container.

Non recommended packaging : Steel and aluminium.

7.3. Specific end use(s)

Use : Use only as directed. Do not mix with other products.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits : Occupational exposure limits have not been established for this product. Derived no-effect levels (DNEL) have not been established for this product. Predicted no-effect concentrations (PNEC) have not been established for this product.

Workplace exposure limits (mg/m³):

Chemical name	Country	TWA 8 hour (mg/m3)	STEL 15 min (mg/m3)	Comments
Hydrochloric acid	GB	2	8	(gas and aerosol mists)
Hydrochloric acid	EC	8	15	-
Oxalic acid	GB	1	2	-
Oxalic acid	EC	1	-	-

Derived no-effect level (DNEL) for workers:

Chemical name	Route of exposure	DNEL, short-term		DNEL, long-term	
		Local effect	Systemic effect	Local effect	Systemic effect
Hydrochloric acid	Inhalation	15 mg/m3		8 mg/m3	
Oxalic acid	Dermal	0,69 mg/kg bw			2,29 mg/kg bw/day
	Inhalation				4,03 mg/m3

Derived no-effect level (DNEL) for consumers:

Chemical name	Route of exposure	DNEL, short-term		DNEL, long-term	
		Local effect	Systemic effect	Local effect	Systemic effect
Oxalic acid	Dermal	0,35 mg/kg bw			1,14 mg/kg bw/day
	Oral				1,14 mg/kg bw/day

Predicted no-effect concentration (PNEC):

Chemical name	Route of exposure	Fresh water	Marine water	
Hydrochloric acid	Water	0,036 mg/l	0,036 mg/l	
	Intermittent water			0,045 mg/l

Oxalic acid	STP Water Intermittent water STP	0,1622 mg/l	0,0162 mg/l	0,036 mg/l 1,622 mg/l 1550 mg/l

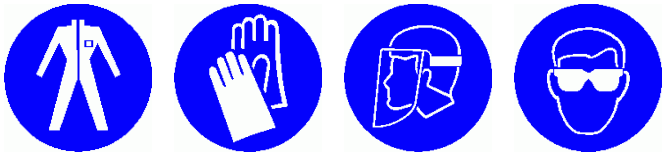
8.2. Exposure controls

Engineering measures : Use only in well-ventilated areas. Comply with standard precautionary measures for working with chemicals.

Hygienic measures : When using do not eat, drink or smoke.

Personal protective equipment:
The efficiency of personal protective equipment depends among other things on temperature and degree of ventilation. Always get professional advice for the particular local situation.

:



Body protection : Wear appropriate protective clothing, overalls or suit, and similar boots in accordance with EN 365/367 resp. 345. Suitable material: neoprene. Indication of permeation breakthrough time: not permeable.

Respiratory protection : Take care of sufficient ventilation. Wear suitable respiratory protection in case of large scale exposure. Suitable: gas filter type AB (grey/brown), class I or higher on e.g. a facemask in accordance with EN 140.

Hand protection : Wear appropriate safety gloves in accordance with EN 374. Suitable material: neoprene. ± 0,5 mm Indication of permeation breakthrough time: not permeable.

Eye protection : Wear a face shield or appropriate safety glasses with side shields, in accordance with EN 166.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	: Liquid.	
Colour	: Colourless.	
Odour	: Characteristic.	
Odour threshold	: Not known.	
pH	: 1	
Acid reserve (g NaOH/100 ml)	: Not known.	
Solubility in water	: Soluble.	
Partition coefficient (n-octanol/water)	: Not applicable.	Contains surfactants. The O/W system emulsifies.
Flash point	: > 100 °C	
Flammability (solid, gas)	: Not applicable.	Liquid. See flashpoint.
Auto ignition temperature	: > 370 °C	
Boiling point/boiling range	: 100 °C	
Melting point/melting range	: 0 °C	
Explosive properties	: None known.	Does not contain explosives.
Explosion limits (% in air)	: Not known.	
Oxidising properties	: Not applicable.	Does not contain oxidizing substances.
Decomposition temperature	: Not applicable.	
Viscosity (20°C)	: Not known.	
Viscosity (40°C)	: Not relevant.	The product contains < 10% substances having an aspiration hazard.
Vapour pressure (20°C)	: Not known.	
Vapour density (20°C)	: > 1	(air = 1)
Relative density (20°C)	: 1 g/ml	
Evaporation rate	: < 1	(n-butyl acetate = 1)

SECTION 10 STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity : See sub-sections below.

10.2. Chemical stability

Stability : Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reactivity : No other hazardous reactions known.

10.4. Conditions to avoid

Conditions to avoid : See section 7.

10.5. Incompatible materials

Materials to avoid : Keep away from bases. Keep away from oxidizing agents.

10.6. Hazardous decomposition products

Hazardous decomposition products : Not known.

SECTION 11 TOXICOLOGICAL INFORMATION *

11.1. Information on toxicological effects

No toxicological research has been carried out on this product.

Inhalation

- Acute toxicity : Calculated LC50: 10 mg/l. Ingredients of unknown toxicity: 3 %. ATE: > 5 mg/l. Low toxicity. Not classified - based on available data, the classification criteria are not met.
- Corrosion/irritation : Corrosive. May cause sore throat and coughing. May cause pulmonary oedema. Symptoms of pulmonary oedema often manifest after several hours.
- Sensitisation : Not classified - based on available data, the classification criteria are not met.
- Carcinogenicity : Does not contain carcinogenic substances. Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : Does not contain mutagenic substances. Not classified - based on available data, the classification criteria are not met.

Skin contact

- Acute toxicity : Calculated LD50: > 5000 mg/kg.bw. Ingredients of unknown toxicity: 8 %. ATE: > 2000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met.
- Corrosion/irritation : Corrosive. Causes severe burns.
- Sensitisation : Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : Does not contain mutagenic substances. Not classified - based on available data, the classification criteria are not met.

Eye contact

- Corrosion/irritation : Corrosive. Risk of serious damage to eyes.

Ingestion

- Acute toxicity : Calculated LD50: > 5000 mg/kg.bw. Ingredients of unknown toxicity: 8 %. ATE: > 2000 mg/kg.bw. Not classified - based on available data, the classification criteria are not met.
- Corrosion/irritation : Corrosive. May cause burning pain in throat and mouth. May cause a feeling of sickness, stomachache, vomiting and diarrhoea.

Carcinogenicity : Does not contain carcinogenic substances. Not classified - based on available data, the classification criteria are not met.

Mutagenicity : Does not contain mutagenic substances. Not classified - based on available data, the classification criteria are not met.

Toxicological information:

Chemical name	Property		Method	Test animal
Hydrochloric acid	LC50 (inhalation) - estimate	> 5000 mg/m3		
	NOEL (carcinogenicity) - estimate	Not carcinogenic		Rat
	LD50 (dermal)	> 5010 mg/kg bw	-----	Rabbit
	Skin irritation	Corrosive.	OECD 404	Rat
	Skin sensitisation	Not sensitizing	OECD 406	Mouse
	Eye irritation	Corrosive.	OECD 405	Rabbit
Oxalic acid	Eye irritation	Irritant	OECD 405	Rabbit
	Skin sensitisation	Not sensitizing		
	Genotoxicity - in vitro	Not genotoxic	OECD 473	-----
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	LD50 (dermal)	20000 mg/kg bw	-----	Rabbit
	LD50 (dermal) - estimate	500 mg/kg bw	-----	-----
	NOEL (carcinogenicity, oral)	Not carcinogenic		
	Skin irritation	Mildly irritant	OECD 404	Rabbit
	LD50 (oral)	375 mg/kg bw	-----	Rat

SECTION 12 ECOLOGICAL INFORMATION *

12.1. Toxicity

No ecotoxicological research has been carried out on this product.

Ecotoxicity : Calculated LC50 (fish): 42 mg/l. Calculated EC50 (waterflea): 62 mg/l. Contains 0 % of components with unknown hazards to the aquatic environment.

12.2. Persistence and degradability

Persistence – degradability : No specific information known. The surfactants contained in this preparation comply with the biodegradability criteria as laid down in Regulation (EC) 648/2004 on detergents.

12.3. Bioaccumulative potential

Bioaccumulative potential : No specific information known.

12.4. Mobility in soil

Mobility : If product enters soil, it will be highly mobile and may contaminate groundwater.

12.5. Results of PBT and vPvB ass

PBT/vPvB assessment : Does not contain PBT or vPvB substances.

12.6. Other adverse effects

Other information : Not applicable.

SECTION 13 DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Product residues	:	Do not dispose empty pack with waste produced by households. Containers may be recycled. Treat product residues and non-empty pack as hazardous waste.
Additional warning	:	None.
European waste catalogue	:	Dispose hazardous waste in accordance with Directive 91/689/EEC under acknowledgement of a waste code according to Commission Decision 2000/532/EC to an official chemical waste depot.
Local legislation	:	Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.

SECTION 14 TRANSPORT INFORMATION *

14.1. UN number

UN nr. : UN 1789

14.2. UN proper shipping name

Transport name : HYDROCHLORIC ACID

14.3/14.4/14.5. Transport hazard class(es)/Packing group/Environmental hazards

ADR/RID (road / railway)

Class	:	8
Classification code	:	C1
Packaging group	:	III
Danger label	:	8
	:	

IMDG (sea)

Class	:	8
Packaging group	:	III
EmS (fire / spill)	:	F - A / S - B
Marine pollutant	:	No

IATA (air)

Class	:	8

14.6. Special precautions for user

Other information : Country specific variations may apply. It is possible that a "Limited Quantity" exemption applies to the transport of this product.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Marpol : Not intended to be carried in bulk according to International Maritime Organisation (IMO) instruments. Packaged liquids are not considered bulk.

SECTION 15 REGULATORY INFORMATION *

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

Community regulations : Regulation (EC) No 453/2010 (REACH), Regulation (EC) No 1272/2008 (CLP) and other regulations.

15.2. Chemical safety assessment

Chemical safety assessment	:	Not applicable.

SECTION 16 OTHER INFORMATION *

16.1. Other information

The information in this safety data sheet is compiled in compliance with Regulation (EC) No 453/2010 dated 20 May 2010 and accurate to the best of our knowledge and experience at the date of issue specified. It is the user's obligation to use this product safely and to comply with all applicable laws and regulations concerning the use of the product. This safety data sheet complements the technical information sheets but does not replace them and offers no warranty with regard to product properties.

Users are also forewarned for any hazards involved when the product is used for other purposes than those for which it is designed.

Changed or new information with regard to the previous release is indicated with an asterisk (*).

Full text of H-phrases mentioned in section 3:

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.

List of abbreviations and acronyms that could be (but not necessarily are) used in this safety data sheet:

ADR	:	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	:	Acute Toxicity Estimate
CLP	:	Classification, Labeling & Packaging
CMR	:	Carcinogenic, Mutagenic or toxic for Reproduction
EEC	:	European Economic Community
EU	:	European Union
IATA	:	International Air Transport Association
IBC	:	Intermediate Bulk Container
IBC code	:	International Bulk Chemical Code
IMDG	:	International Maritime Dangerous Goods Code
LD50/LC50	:	Lethal Dose/Concentration for 50% of a population
MAC	:	Maximum Allowable Concentration
MARPOL	:	International Convention for the Prevention of Pollution From Ships
NO(A)EL	:	No Observed (Adverse) Effect Level
OECD	:	Organisation for Economic Co-operation and Development
PBT	:	Persistent, Bioaccumulative and Toxic
PC	:	Chemical product category
PT	:	Product type
REACH	:	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	:	Regulations concerning the International Carriage of Dangerous Goods by Rail
STP	:	Sewage Treatment Plant
SU	:	Sector of Use
TWA/STEL	:	Time-Weighted Average/Short Term Exposure Limit
UN	:	United Nations
VOC	:	Volatile Organic Compounds
vPvB	:	Very Persistent and Very Bioaccumulative

Number format : "," used as decimal separator.

History

Date of first issue	:	13-06-2013	
Date of second issue	:	23-10-2014	Herewith all previous issues are expired.