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

1.1. Product identifier

Product name : STAR BRITE RUST STAIN REMOVER
Product code : 892XX

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

Application : SU21 Consumer product. PC35 Cleaning agent. Other cleaning, care and maintenance products (excludes biocidal products).

1.3. Details of the supplier of the safety data sheet

Supplier : Star brite Nederland B.V.
Kryptonweg 7
NL-3812 RZ Amersfoort, The Netherlands
Telephone : +31(0)337853616
E-mail : info@starbrite.nl
Website : http://www.starbrite.nl

Manufacturer : Star Brite Europe, LLC.
4041 SW 47TH AVE
33314 Fort Lauderdale, FL
United States of America
Telephone : +1 954 587 6280
E-mail : europe@starbrite.com

1.4. Emergency telephone number

EMERGENCY TELEPHONE NUMBER, for DOCTORS/FIRE BRIGADE/POLICE only:
NL - Telephone : +31(0)337853616 (During office hours only)

SECTION 2 HAZARDS IDENTIFICATION *

2.1. Classification of the substance or mixture

CLP classification (1272/2008/EC) : Skin irritation, category 2. Serious eye damage, category 1.

Human health hazards : Causes skin irritation. Causes serious eye damage.
Physical/chemical hazards : Not classified as dangerous according to statutory EC-Directives.
Environmental hazards : Not classified as dangerous according to statutory EC-Directives.
Other information : Do not breathe spray. Use only in well-ventilated areas.

2.2. Label elements

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



Signal word : Danger

H- and P-phrases :
H315 Causes skin irritation.
H318 Causes serious eye damage.
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.

P280	Wear protective gloves/eye protection/face protection.
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.

Labelling of packagings where the contents do not exceed 125 ml and it is technically impossible to list all phrases:

Hazard pictograms :



Signal word : Danger

H- and P-phrases :

H318	Causes serious eye damage.
P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P280 eyes	Wear eye protection/face protection.
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.

Additional labelling (for all packaging sizes)

: Contains: Oxalic acid, dihydrate .

Ingredient declaration according to Regulation EC 648/2004:

Contains:	Concentration (%)
Non-ionic surfactants	< 5

2.3. Other hazards

Other information : Does not contain PBT or vPvB substances in concentrations higher than 0,1%. Human health: This product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Regulation (EU) 2017/2100 or Regulation (EU) 2018/605. Environment: This product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Regulation (EU) 2017/2100 or Regulation (EU) 2018/605.

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.
Oxalic acid, dihydrate	3 - < 10	6153-56-6	612-167-2		01-2119534576-33
2-Butoxyethanol	1 - < 5	111-76-2	203-905-0		

Substance name	Hazard Class	H-phrases	Pictograms	
Oxalic acid, dihydrate	Acute Tox. 4; Acute Tox. 4; Eye Dam. 1	H302; H312; H318	GHS05; GHS07	
2-Butoxyethanol	Acute Tox. 4; Acute Tox. 3; Skin Irrit. 2; Eye Irrit. 2	H302; H331; H315; H319	GHS06; GHS07	inhalation: ATE = 3 mg/L (vapours) oral: ATE = 1200 mg/kg bw

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

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. Consult a doctor if victim feels unwell.
Skin contact	:	Take off contaminated clothing. Wash off skin with plenty of water before product dries up. Consult a doctor if irritation persists.
Eye contact	:	Wash out with (lukewarm) water for at least 15 minutes. Remove contact lenses. Consult a doctor 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. Consult a doctor immediately.

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

Effects and symptoms

Inhalation	:	May cause headache, dizziness and a feeling of sickness. May cause irritation to respiratory airways and coughing.
Skin contact	:	Irritant. May cause dry skin and redness.
Eye contact	:	Strongly irritant. Irreversible effects on the eye/serious damage to eyes. May cause redness and severe pain.
Ingestion	:	May cause a feeling of sickness, 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	:	Use of heavy stream of water may spread fire.

5.2. Special hazards arising from the substance or mixture

Special exposure hazards	:	None known.
Hazardous thermal decomposition and combustion 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. Attention: extinguishing water can be corrosive.
Other information	:	Collect contaminated fire extinguishing water separately. Avoid release of product into sewers, surface water and/or ground water.

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. 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. Keep away from oxidizing agents.

Recommended packaging : Keep only in the original container.

Non recommended packaging : Steel (except stainless steel).

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	Province	TWA 8 hour (mg/m3)	STEL 15 min (mg/m3)	Comments	Source
2-Butoxyethanol	EC	98	246	Skin	Directive 2000/39/EC
	GB	123	246	Skin	BMGV
Oxalic acid	GB	1	2	-	
	EC	1	-	-	Directive 2006/15/EC

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
Oxalic acid, dihydrate	Dermal				0,882 mg/kg bw/day
	Inhalation				3,11 mg/m3
2-Butoxyethanol	Inhalation	246 mg/m3			98 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, dihydrate	Inhalation				0,466 mg/m3
	Dermal				0,315 mg/kg bw/day
	Oral				0,315 mg/kg bw/day
2-Butoxyethanol	Inhalation	147 mg/m3			59 mg/m3
	Oral		26.7 mg/kg bw		6.3 mg/kg bw/day

Predicted no-effect concentration (PNEC):

Chemical name	Route of exposure	Fresh water	Marine water	
Oxalic acid, dihydrate	Water	0,16 mg/l	0,016 mg/l	
	STP			1550 mg/l
2-Butoxyethanol	Water	8.8 mg/l	0.88 mg/l	
	Sediment	34.6 mg/kg	3.46 mg/kg	
	Intermittent water			9,1 mg/l
	STP			463 mg/l
	Soil			2.33 mg/kg
	Oral			0.02 mg/kg food

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 : Use of specific protective industrial clothing is not required for momentary use. Wear suitable protective clothing, overalls or suit, and similar boots in accordance with EN 365/367 resp. 345 in case of frequent or prolonged use and in case of large scale exposure. Suitable material: neoprene. Indication of permeation breakthrough time: 6 hours.

Respiratory protection : Take care of sufficient ventilation. Wear suitable respiratory protection in case of large scale exposure. Suitable: gas filter type A (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: 6 hours.

Eye protection : Wear 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

Physical state : Liquid.
Colour : Colourless.
Odour : Characteristic.
Odour threshold : Not known.
pH : < 2
Alkali 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. Not measured. Not relevant for mixtures.
Flash point	:	Not applicable.	
Flammability (solid, gas)	:	Not applicable.	Liquid.
Auto ignition temperature	:	> 180 °C	
Boiling point/boiling range	:	100 °C	
Melting point/melting range	:	0 °C	
Explosive properties	:	Not an explosive.	
Explosion limits (% in air)	:	Not applicable.	
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.	
Relative vapour density	:	Not known	(air = 1)
Relative density (20°C)	:	1,0275 g/ml	
Particle characteristics	:	Not applicable.	Liquid.

9.2. Other information

Other information : Not relevant.

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 : Reacts vigorously in contact with alkalines. Strong heat development possible.

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 hazard classes as defined in Regulation (EC) No 1272/2008

Inhalation

Acute toxicity	:	Calculated LC50: 10 mg/l. Ingredients of unknown toxicity: < 1 %. ATE: > 5 mg/l. Low toxicity. Not classified - based on available data, the classification criteria are not met. May cause headache, dizziness and a feeling of sickness.
Corrosion/irritation	:	May cause irritation to respiratory airways and coughing. Not classified - based on available data, the classification criteria are not met.
Sensitisation	:	Does not contain substances classified as respiratory sensitiser. Not classified - based on available data, the classification criteria are not met.

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

Mutagenicity : Not expected to be mutagenic. 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: < 1 %. ATE: > 2000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met.

Corrosion/irritation : Irritant. May cause redness. Prolonged contact may dry out and defat the skin.

Sensitisation : Not classified - based on available data, the classification criteria are not met.

Mutagenicity : Not expected to be mutagenic. Not classified - based on available data, the classification criteria are not met.

Eye contact

Corrosion/irritation : Risk of serious damage to eyes.

Ingestion

Acute toxicity : Calculated LD50: > 4015 mg/kg.bw. Ingredients of unknown toxicity: < 1 %. ATE: > 2000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met.

Aspiration : Not classified - based on available data, the classification criteria are not met. Does not contain substances with an aspiration hazard.

Corrosion/irritation : May cause a feeling of sickness, vomiting and diarrhoea.

Carcinogenicity : Not expected to be carcinogenic. Not classified - based on available data, the classification criteria are not met.

Mutagenicity : Not expected to be mutagenic. Not classified - based on available data, the classification criteria are not met.

Reprotoxicity : Development: Not expected to be reprotoxic. Development: Not classified - Based on available data, the classification criteria are not met. Fertility: not expected to be reprotoxic. Fertility: Not classified - based on available data, the classification criteria are not met.

Toxicological information:

Chemical name	Property		Method	Test animal
Oxalic acid, dihydrate	Eye irritation	Irritant	OECD 405	Rabbit
	LD50 (dermal)	20000 mg/kg bw	-----	Rabbit
	LD50 (oral)	375 mg/kg bw	-----	Rat
	LD50 (dermal) - estimate	500 mg/kg bw	-----	-----
	Skin sensitisation	Not sensitizing	OECD 429	Mouse
	Genotoxicity - in vitro	Not genotoxic	OECD 473	-----
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	Skin irritation	Non-irritant	OECD 404	Rabbit
	LC50 (inhalation) - estimate	> 5000 mg/m3		-----
2-Butoxyethanol	Eye irritation	Irritant	OECD 405	Rabbit
	LD50 (dermal)	435 mg/kg bw	OECD 402	Rabbit
	NOAEL (inhalation)	152 mg/m3	OECD 413	Rat
	NOAEL (fertility, oral)	720 mg/kg bw/d		
	Genotoxicity - in vitro	Not genotoxic		
	NOEL (carcinogenicity, oral)	Not carcinogenic		
	LD50 (oral)	1746 mg/kg bw	OECD 401	Rat
	NOAEL (dermal)	> 150 mg/kg bw/d	OECD 411	Rabbit
	Genotoxicity - in vivo	Not genotoxic	OECD 474	Mouse
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	NOAEL (development, oral)	> 100 mg/kg bw/d	OECD 414	Rat
	Skin irritation	Irritant	OECD 404	Rabbit
	Skin sensitisation	Not sensitizing	OECD 406	Guinea pig
	LD50 (oral) - estimate	1200 mg/kg bw		

11.2. Information on other hazards

Endocrine disrupting properties	:	This product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Regulation (EU) 2017/2100 or Regulation (EU) 2018/605.
Other information	:	Not applicable.

SECTION 12 ECOLOGICAL INFORMATION *

12.1. Toxicity

No ecotoxicological research has been carried out on this product.

Ecotoxicity	:	Calculated LC50 (fish): 1015 mg/l. Calculated EC50 (waterflea): 396 mg/l. Contains 0 % of components with unknown hazards to the aquatic environment. Not classified - based on available data, the classification criteria are not met.

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 assessment

PBT/vPvB assessment	:	Does not contain PBT or vPvB substances in concentrations higher than 0,1%.

12.6. Endocrine disrupting properties

Endocrine disrupting properties	:	This product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Regulation (EU) 2017/2100 or Regulation (EU) 2018/605.

12.7. Other adverse effects

Other adverse effects	:	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.
Waste water discharge	:	Do not dispose of into the environment, drains, sewers or water courses.
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 or ID number

UN nr.	:	None.

14.2. UN proper shipping name

Transport name : Not regulated.

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

ADR/RID/ADN (road/railway/inland waterways)
Class : This product is not classified according to ADR/RID/ADN.

IMDG (sea)
Class : This product is not classified according to IMDG.
Marine pollutant : No

IATA (air)
Class : This product is not classified according to IATA.

14.6. Special precautions for user

Other information : Country specific variations may apply.

14.7. Maritime transport in bulk according to IMO instruments

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 (EU) No 2020/878 (REACH), Regulation (EC) No 1272/2008 (CLP) and other regulations. Regulation (EC) No 648/2004 (detergents). Directive 2008/98/EC (waste).
: This product is exempted from classification as “Corrosive” despite an extreme pH, based on a tiered weight of evidence strategy.

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 (EU) No 2020/878 dated 18 June 2020 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 (*).

List of abbreviations and acronyms that could be used (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
GHS : Globally Harmonized System of Classification and Labelling of Chemicals
IATA : International Air Transport Association

IBC code	:	The IMO International Code for construction and equipment of ships carrying dangerous chemicals in bulk.
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
UFI	:	Unique formula identifier
VOC	:	Volatile Organic Compounds
vPvB	:	Very Persistent and Very Bioaccumulative

Key data used to compile the Safety Data Sheet are from, but not limited to, one or more sources of information e.g. toxicological data from material suppliers, CONCAWE, IFRA, CESIO, Regulation EG 1272/2008, etc.

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008:

Skin Irrit. 2	:	On basis of test data. Calculation method.
Eye Dam. 1	:	Calculation method.

Full text of hazard classes mentioned in section 3:

Acute Tox. 3	:	Acute toxicity, category 3.
Acute Tox. 4	:	Acute toxicity, category 4.
Skin Irrit. 2	:	Skin irritation, category 2.
Eye Dam. 1	:	Serious eye damage, category 1.
Eye Irrit. 2	:	Eye irritation, category 2.

Full text of H-phrases mentioned in section 3:

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H331	Toxic if inhaled.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.

Advice on any training appropriate for workers: none.

Country / Language code	:	EC / EN
Number format	:	"," used as decimal separator.

End of safety data sheet.