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

1.1. Product identifier

Product name : STAR BRITE ULTIMATE ALUMINUM CLEANER/RESTORER
Product code : 877XX

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

Application : SU21 Consumer product. PC35 Cleaning agent. Chromium, rim and other metal cleaners - all vehicle types.

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

Supplier : 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) : Corrosive to metals, category 1. Skin corrosion, category 1. Serious eye damage, 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.

2.2. Label elements

Label elements ((EU) 1272/2008):
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.

P234	Keep only in original container.
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.
P390	Absorb spillage to prevent material damage.
P501	Dispose of contents/container to an official chemical waste depot.

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 :

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.
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.
P501	Dispose of contents/container to an official chemical waste depot.

Additional labelling (for all packaging sizes)

: Contains: Sulphuric acid 9,3 % .

Ingredient declaration according to Regulation EC 648/2004:

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

Other information : 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 in concentrations higher than 0,1%.

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.

Urea tetrafluoroborate	10 - < 20	112592-62-8	-----		
Sulphuric acid	5 - < 10	7664-93-9	231-639-5		
Alcohols, C7-21, ethoxylated	0,1 - < 1	68991-48-0	614-889-3		

Substance name	Hazard Class	H-phrases	Pictograms	
Urea tetrafluoroborate	Met. Corr. 1; Acute Tox. 4; Eye Irrit. 2	H290; H302; H319	GHS05; GHS07	
Sulphuric acid	Skin Corr. 1A; Eye Dam. 1	H314; H318	GHS05	H314 A : C >= 15 % H318 : C >= 15 % H315 : C >= 5 % H319 : C >= 5 %
Alcohols, C7-21, ethoxylated	Acute Tox. 4; Eye Dam. 1; Aquatic Acute 1; Aquatic Chronic 3	H302; H318; H400; H412	GHS05; GHS07; GHS09	M (acute) = 1

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. 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 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, 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. Do not use saw-dust. 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. Avoid contact with skin and eyes. Avoid splashing. Wear protective clothing. After contact with skin, wash immediately with plenty of water.

7.2. Conditions for safe storage, including any incompatibilities

Storage	:	Keep frost-free, in a cool, dry and well-ventilated place.
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	Source
Sulphuric acid		0,05	0,01	-	SCOEL (2007)
	GB	0,05	-	Mist	EH40/2005 (2nd edition, 2011)
	EC	0,05	-	Mist	Directive 2009/161/EU
Urea		10	-		MAC: LT, LV, BG, RU

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
Sulphuric acid	Inhalation	0,1 mg/m3		0,05 mg/m3	
Urea	Dermal		580 mg/kg bw		580 mg/kg bw/day
	Inhalation		292 mg/m3		292 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
Urea	Dermal		580 mg/kg bw		580 mg/kg bw/day
	Inhalation		125 mg/m3		125 mg/m3
	Oral		42 mg/kg bw		42 mg/kg bw/day

Predicted no-effect concentration (PNEC):

Chemical name	Route of exposure	Fresh water	Marine water	
Sulphuric acid	Water	0,0025 mg/l	0,00025 mg/l	
	Sediment	0,002 mg/kg	0,0002 mg/kg	
	STP			8,8 mg/l
Urea	Water	0.47 mg/l	0.047 mg/l	

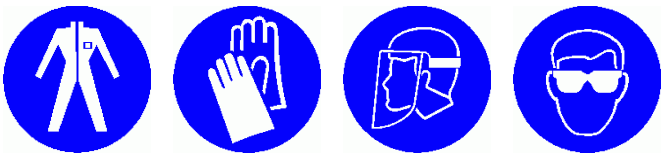
8.2. Exposure controls

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: laminated film. Indication of permeation breakthrough time: 6 hours.

Respiratory protection : Take care of sufficient ventilation.

Hand protection : Wear appropriate safety gloves in accordance with EN 374. Suitable material: laminated film. ± 0,5 mm. Indication of permeation breakthrough time: 6 hours.

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

Physical state : Liquid.

Colour : Colourless.

Odour	:	Characteristic.	
Odour threshold	:	Not known.	
pH	:	1	
Acid reserve (g NaOH/100 ml)	:	7,62	
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.	Does not contain combustible substances in concentrations higher than 1%.
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 explosive.	
Explosion limits (% in air)	:	Not applicable.	
Oxidising properties	:	Not applicable.	
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)	:	2300 Pa	
Relative vapour density	:	Not relevant.	The solvent content of this product is less than 1%.
Relative density (20°C)	:	1,03 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. Reacts with metals.

10.4. Conditions to avoid

Conditions to avoid : See section 7.

10.5. Incompatible materials

Materials to avoid : Keep away from bases.

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

No toxicological research has been carried out on this product.

Inhalation

Acute toxicity : Calculated LC50: > 4,024 mg/l. Ingredients of unknown toxicity: 2 %. 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 : Does not contain substances classified as respiratory sensitiser. 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 : 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: > 5000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met.

Corrosion/irritation : Corrosive. May cause redness, pain and burns (blisters).

Sensitisation : Does not contain skin sensitisers. 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 : Corrosive. Risk of serious damage to eyes.

Ingestion

Acute toxicity : Calculated LD50: > 5000 mg/kg.bw. Ingredients of unknown toxicity: < 1 %. ATE: > 2000 mg/kg.bw. 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 : 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 : 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
Sulphuric acid	LD50 (oral)	2140 mg/kg bw	-----	Rat
	Eye irritation	Severely irritant		Rabbit
	Mutagenicity	Positive	-----	-----
	Mutagenicity - estimate	Not mutagenic		
	Skin sensitisation - estimate	Not sensitizing		
	Genotoxicity - in vitro	Genotoxic		
	Skin irritation	Corrosive.		
	LC50 (inhalation)	375 mg/m3		Rat
	NOAEL (developmental toxicity, inh.)	> 19,3 mg/m3	OECD 414	Mouse
	LC50 (inhalation) - estimate	> 5000 mg/m3		

11.2. Information on other hazards

Endocrine disrupting properties : Not applicable.

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): 136 mg/l. Calculated EC50 (waterflea): 415 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 : Not applicable.

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. : UN 1760

14.2. UN proper shipping name

Transport name : CORROSIVE LIQUID, N.O.S. (SULPHURIC ACID ; Urea tetrafluoroborate)

Transport name (IMDG, IATA) : CORROSIVE LIQUID, N.O.S. (Sulphuric acid ; Urea tetrafluoroborate)

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

ADR/RID/ADN (road/railway/inland waterways)

Class	:	8
Classification code	:	C9
Packaging group	:	III
Danger label	:	8
Tunnel restriction code	:	E

:



Other information : Not intended for carriage by tank-vessels on inland waterways.

IMDG (sea)

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

IATA (air)

Class	:	8
ERG code	:	8L

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. 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).

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 Corr. 1	:	Expert judgement.
Eye Dam. 1	:	Calculation method.
Met. Corr. 1	:	Expert judgement.

Full text of hazard classes mentioned in section 3:

Acute Tox. 4	:	Acute toxicity, category 4.
Skin Corr. 1A/B/C	:	Skin corrosive, category 1A/B/C.
Eye Dam. 1	:	Serious eye damage, category 1.
Eye Irrit. 2	:	Eye irritation, category 2.
Aquatic Chronic 3	:	Hazardous to the aquatic environment — Chronic category 3.
Aquatic Acute 1	:	Hazardous to the aquatic environment — Acute category 1.
Met. Corr. 1	:	Corrosive to metals, category 1.

Full text of H-phrases mentioned in section 3:

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

Advice on any training appropriate for workers: none.

Number format : "," used as decimal separator.

End of safety data sheet.