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

1.1. Product identifier

Product name : STAR BRITE STAR-TRON DIESEL ADDITIVE
Product code : 931XX

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

Application : SU21 Consumer product. Fuel additives and fuel components.

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) : Aspiration hazard, category 1. Hazardous to the aquatic environment — Chronic category 3.

Human health hazards : May be fatal if swallowed and enters airways. Repeated exposure may cause skin dryness or cracking.

Physical/chemical hazards : Not classified as dangerous according to statutory EC-Directives. Combustible.

Environmental hazards : Harmful to aquatic life with long lasting effects.

2.2. Label elements

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

Signal word : Danger

H- and P-phrases :

H304	May be fatal if swallowed and enters airways.
H412	Harmful to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.
P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.

P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331	Do NOT induce vomiting.
P405	Store locked up.
P273	Avoid release to the environment.
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 :

H304	May be fatal if swallowed and enters airways.
H412	Harmful to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.
P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331	Do NOT induce vomiting.
P405	Store locked up.
P501	Dispose of contents/container to an official chemical waste depot.

Additional labelling (for all packaging sizes)

: Contains: Hydrocarbons, C11-14, n-alkanes, isoalkanes, cyclics, < 2% aromatics ; Distillates (petroleum), hydro- treated light .

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.

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.
Hydrocarbons, C11-14, n-alkanes, isoalkanes, cyclics, < 2% aromatics	> 75	-----	926-141-6		01-2119456620-43
Distillates (petroleum), hydro- treated light	5 - < 10	64742-47-8	265-149-8		

Substance name	Hazard Class	H-phrases	Pictograms	
Hydrocarbons, C11-14, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Asp. Tox. 1	H304; EUH066	GHS08	
Distillates (petroleum), hydro- treated light	Flam. Liq. 3; Asp. Tox. 1; Skin Irrit. 2; STOT SE 3; Aquatic Chronic 2	H226; H304; H315; H336; H411	GHS02; GHS07; GHS08; GHS09	

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 and soap before product dries up. Consult a doctor if irritation persists.
Eye contact	:	Wash out with (lukewarm) water. Remove contact lenses. Consult a doctor if irritation persists.
Ingestion	:	Do not induce vomiting. Give nothing to drink. Do rinse the mouth. As necessary give 1 or 2 soupspoons of laxative (sodium sulphate). Never give anything by mouth to an unconscious person. Consult a doctor immediately if victim feels unwell.

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

Effects and symptoms

Inhalation	:	May cause headache, dizziness and a feeling of sickness.
Skin contact	:	Repeated exposure may cause skin dryness or cracking.
Eye contact	:	May cause stinging of eyes and redness.
Ingestion	:	May cause a feeling of sickness, vomiting and diarrhoea. May cause lung damage, sore throat and lack of breath.

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	:	Water jet. Use of heavy stream of water may spread fire.

5.2. Special hazards arising from the substance or mixture

Special exposure hazards	:	Will float on water and can be reignited.
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.

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. Vapours are heavier than air. Build up (of gasses) in low areas involves risk of suffocation.

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. Waste product should not be allowed to contaminate soil or water.

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. Absorb residues in sand or other inert material. Dispose at an authorised waste collection point. Wash away remainder with plenty of water and soap.

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. Keep away from sources of ignition — No smoking. 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 : PE and PP.

7.3. Specific end use(s)

Use : Use only as directed.

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
Hydrocarbons, C11-14, n-alkanes, isoalkanes, cyclics, < 2% aromatics		1200	-	-	CEFIC-HSPA
Distillates (petroleum), hydro- treated light		1200	-		CEFIC-HSPA

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 under normal conditions of use. In case of large scale exposure wear suitable protective clothing, overalls or suit, and similar boots. Suitable material: nitril. 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	:	Under normal conditions of use specific gloves are not required. Wear appropriate gloves in case of frequent or prolonged use and in case of large scale exposure. Suitable material: nitril. ± 0,5 mm. Indication of permeation breakthrough time: 6 hours.
Eye protection	:	Wear appropriate safety glasses when there is danger of possible eye contact.

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	:	Not applicable.	Waterfree product.
Solubility in water	:	Not soluble.	
Partition coefficient (n-octanol/water)	:	Not known.	Not measured. Not relevant for mixtures.
Flash point	:	79 °C	
Flammability (solid, gas)	:	Not applicable.	Liquid. See flashpoint.
Auto ignition temperature	:	> 315 °C	
Boiling point/boiling range	:	148 - 270 °C	
Melting point/melting range	:	Not known.	
Explosive properties	:	Not explosive.	
Explosion limits (% in air)	:	Not known.	Lower explosion limit in air (%): 0,6 (Hydrocarbons, C11-14, n-alkanes, isoalkanes, cyclics, < 2% aromatics)
	:		Upper explosion limit in air (%): 7 (Distillates (petroleum), hydro- treated light)
Oxidising properties	:	Not applicable.	Does not contain oxidizing substances.
Decomposition temperature	:	Not applicable.	
Viscosity (20°C)	:	Not known.	
Viscosity (40°C)	:	< 7 mm2/sec	
Vapour pressure (20°C)	:	Not known.	
Relative vapour density	:	Not known	(air = 1)
Relative density (20°C)	:	0,8 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	:	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 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

No toxicological research has been carried out on this product.

Inhalation

- Acute toxicity : Calculated LC50: > 5,445 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 : 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.
- Mutagenicity : Does not contain mutagenic substances. Not classified - based on available data, the classification criteria are not met.

Skin contact

- Acute toxicity : Calculated LD50: > 2200 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 : Slight irritation possible. Repeated exposure may cause skin dryness or cracking. Prolonged contact may dry out and defat the skin. Not classified - based on available data, the classification criteria are not met.
- Sensitisation : Does not contain skin sensitisers. 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 : Slight irritation possible. Not classified - based on available data, the classification criteria are not met.

Ingestion

- Acute toxicity : Calculated LD50: > 4401 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 : Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal. If swallowed, if any of the following delayed signs and symptoms appear within the next 6 hours, transport to the nearest medical facility: fever greater than 38.3° C, shortness of breath, chest congestion or continued coughing or wheezing.
- Corrosion/irritation : May cause a feeling of sickness, stomachache, vomiting and diarrhoea.
- Carcinogenicity : Not expected to be carcinogenic. 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.
- 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

Hydrocarbons, C11-14, n-alkanes, isoalkanes, cyclics, < 2% aromatics	NOAEL (inhalation) - estimate	> 2200 mg/m3	Read across	Rat
	LC50 (inhalation) - estimate	> 5000 mg/m3	-----	-----
	NOAEL (development) - estimate	Not teratogenic	-----	-----
	NOAEL (fertility) - estimate	Not reprotoxic	-----	-----
	LD50 (dermal)	> 2000 mg/kg bw	OECD 402	Rat
	Skin irritation	Non-irritant	OECD 404	Rabbit
	Eye irritation	Non-irritant	OECD 405	Rabbit
	Skin sensitisation	Not sensitizing	OECD 406	-----
	LD50 (oral)	> 5000 mg/kg bw	OECD 401	Rat
	LC50 (inhalation)	> 4950 mg/m3	OECD 403	Rat
	NOAEL (oral) - estimate	> 5500 mg/kg bw/d	Read across	Rat
	Mutagenicity - estimate	Not mutagenic	Read across	
	Respiratory irritation - estimate	Non-irritant		
	NOEL (carcinogenicity) - estimate	Not carcinogenic		
Distillates (petroleum), hydro- treated light	LC50 (inhalation) - estimate	> 5280 mg/m3	Read across	Rat
	NOEL (carcinogenicity) - estimate	Not carcinogenic	Read across	-----
	NOAEL (inhalation) - estimate	> 1000 mg/m3	Read across	Mouse
	NOAEL (oral) - estimate	750 mg/kg bw/d	Read across	Rat
	Skin sensitisation - estimate	Not sensitizing	Read across	Guinea pig
	LD50 (dermal) - estimate	> 2000 mg/kg bw	-----	Rabbit
	Skin irritation - estimate	Irritant	Read across	Rabbit
	Eye irritation - estimate	Non-irritant	Read across	Rabbit
	Mutagenicity - estimate	Negative	Read across	Salmonella typhimurium
	NOAEL (fertility) - estimate	1500 mg/kg.d	Read across	Rat
	NOAEL (development) - estimate	500 mg/kg.d	Read across	Rat
	LD50 (oral) - estimate	> 5000 mg/kg bw	Read across	Rat

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 : Harmful to aquatic organisms. Calculated LC50 (fish): 21 mg/l. Calculated EC50 (waterflea): 15 mg/l. Contains 0 % of components with unknown hazards to the aquatic environment. May form an oil film on the water surface causing a decline in oxygen content with possible adverse effects for aquatic organisms.

12.2. Persistence and degradability

Persistence – degradability : May cause long-term adverse effects in the aquatic environment.

12.3. Bioaccumulative potential

Bioaccumulative potential : No specific information known.

12.4. Mobility in soil

Mobility : Adsorbs to soil and has low mobility. Floats on water.

12.5. Results of PBT and vPvB assessment

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

12.6. Endocrine disrupting properties

Endocrine disrupting properties : Not applicable.

12.7. Other adverse effects

Other adverse effects : Not applicable.

Ecological information:

Chemical name	Property		Method	Test animal
Distillates (petroleum), hydro- treated light	LC50 (fish) - estimate	> 2 mg/l	OECD 203	Oncorhynchus mykiss
	EC50 (waterflea) - estimate	1,4 mg/l	OECD 202	Daphnia magna
	IC50 (algea) - estimate	> 1 mg/l	OECD 201	Pseudokirchnerella subcapitata
	NOEC (waterflea) - chronic	0,48 mg/l.d	OECD 211	Daphnia magna
	Ultimate aerobic biodegradation (%)	58,6 %	OECD 301 F	
	NOEC (fish)	2 mg/l	OECD 203	Oncorhynchus mykiss
	NOEC (waterflea) - acute	0,3 mg/l	OECD 202	Daphnia magna
	NOEC (fish) - estimate	0,098 mg/l.d		Oncorhynchus mykiss
	Log P(ow)	> 6		
	BCF	537		

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.

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:

Asp. Tox. 1	:	On basis of test data. Calculation method.
Aquatic Chronic 3	:	Calculation method.

Full text of hazard classes mentioned in section 3:

Flam. Liq. 3	:	Flammable liquid, category 3.
Skin Irrit. 2	:	Skin irritation, category 2.
STOT SE 3	:	Specific target organ toxicity after single exposure, category 3.
Asp. Tox. 1	:	Aspiration hazard, category 1.
Aquatic Chronic 2	:	Hazardous to the aquatic environment — Chronic category 2.

Full text of H-phrases mentioned in section 3:

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Advice on any training appropriate for workers: none.

Number format : "," used as decimal separator.

End of safety data sheet.