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

1.1. Product identifier

Product name : STAR BRITE HIGH VISCOSITY 80W90 GEAR LUBE
Product code : 270XX

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

Application : SU21 Consumer product. PC24 Lubricants, greases, release agents.

1.3. Details of the supplier of the safety data sheet

Supplier : Star Brite Europe Inc.
Kryptonweg 7
NL-3812 RZ Amersfoort, The Netherlands
Telephone : +31 970 10255575
E-mail : europe@starbrite.com
Website : www.starbrite.com

1.4. Emergency telephone number

EMERGENCY TELEPHONE NUMBER, for DOCTORS/FIRE BRIGADE/POLICE only:
NL - Telephone : 703-527-3887 (24/7)

SECTION 2 HAZARDS IDENTIFICATION *

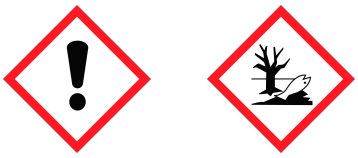
2.1. Classification of the substance or mixture

CLP classification (1272/2008/EC) : Skin sensitization, category 1. Hazardous to the aquatic environment — Chronic category 2.

Human health hazards : May cause an allergic skin reaction. Contains petroleum distillates, may be harmful when ingested.
Physical/chemical hazards : Not classified as dangerous according to statutory EC-Directives.
Environmental hazards : Toxic to aquatic life with long lasting effects.

2.2. Label elements

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



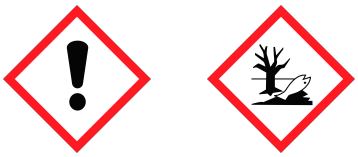
Signal word : Warning

H- and P-phrases :

H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.
P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P280 gloves	Wear protective gloves.
P261 vapour	Avoid breathing vapours.
P302+P352	IF ON SKIN: Wash with plenty of water/soap.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P273	Avoid release to the environment.
P391	Collect spillage.
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 : Warning

H- and P-phrases :

H317	May cause an allergic skin reaction.
P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P261 vapour	Avoid breathing vapours.
P280 gloves	Wear protective gloves.
P302+P352	IF ON SKIN: Wash with plenty of water/soap.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P501	Dispose of contents/container to an official chemical waste depot.

Additional labelling (for all packaging sizes)
: Contains: Polysulfides, di-tert-Bu .

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.
Distillates (petroleum), hydrotreated heavy paraffinic	> 75	64742-54-7	265-157-1	MAC	
Polysulfides, di-tert-Bu	2,5 - < 5	68937-96-2	273-103-3		
Amines, C12-14-alkyl, C6-10-alkyl phosphates	0,1 - < 1	68603-55-4	271-663-3		

Substance name	Hazard Class	H-phrases	Pictograms	
Distillates (petroleum), hydrotreated heavy paraffinic	-----	-----	-----	
Polysulfides, di-tert-Bu	Skin Sens. 1B; Aquatic Acute 1; Aquatic Chronic 1	H317; H400; H410	GHS07; GHS09	M (acute) = 1 M (chronic) = 1
Amines, C12-14-alkyl, C6-10-alkyl phosphates	Skin Irrit. 2; Aquatic Acute 1; Aquatic Chronic 3	H315; H400; H412	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. 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 occurs.
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. Never give anything by mouth to an unconscious person. Consult a doctor 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	:	May cause redness and irritation, sensitisation. May produce an allergic reaction. May cause dry skin.
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 (CO2). 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 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. 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 : 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	Country	TWA 8 hour (mg/m3)	STEL 15 min (mg/m3)	Comments	Source
Distillates (petroleum), hydrotreated heavy paraffinic		5	10	Mist	US NIOSH

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
Polysulfides, di-tert-Bu	Inhalation				3.29 mg/m3
	Dermal				4.67 mg/kg bw/day
Amines, C12-14-alkyl, C6-10-alkyl phosphates	Inhalation				0.0548 mg/m3
	Dermal				0.0156 mg/kg bw/day

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
Polysulfides, di-tert-Bu	Inhalation				0.58 mg/m3
	Dermal				1.67 mg/kg bw/day
	Oral				0.167 mg/kg bw/day
Amines, C12-14-alkyl, C6-10-alkyl phosphates	Inhalation				0.00967 mg/m3
	Dermal				0.00556 mg/kg bw/day
	Oral				0.00556 mg/kg bw/day

Predicted no-effect concentration (PNEC):

Chemical name	Route of exposure	Fresh water	Marine water	
Distillates (petroleum), hydrotreated heavy paraffinic	Oral			9,33 mg/kg food

Polysulfides, di-tert-Bu	Water	0.00024 mg/l	0.000024 mg/l	
	Sediment	0.94 mg/kg	0.094 mg/kg	
	STP			4.51 mg/l
	Soil			0.000181 mg/kg
	Oral			6.66 mg/kg food
Amines, C12-14-alkyl, C6-10-alkyl phosphates	Water	0.000315 mg/l	0.000315 mg/l	
	Sediment	0.0767 mg/kg	0.00767 mg/kg	
	STP			3.26 mg/l
	Soil			0.0152 mg/kg

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: 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 : Wear appropriate safety gloves in accordance with EN 374. Suitable material: nitril. 0,75 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	: Green.	
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	: > 100 °C	
Flammability (solid, gas)	: Not applicable.	Liquid. See flashpoint.
Auto ignition temperature	: Not known.	Does not contain substances with a known auto ignition temperature.
Boiling point/boiling range	: > 100 °C	
Melting point/melting range	: < 0 °C	
Explosive properties	: Not an explosive.	
Explosion limits (% in air)	: Not known.	Lower explosion limit in air (%): 0,9 (Distillates (petroleum), hydrotreated heavy paraffinic)
	:	Upper explosion limit in air (%): 7 (Distillates (petroleum), hydrotreated heavy paraffinic)
Oxidising properties	: Not applicable.	Does not contain oxidizing substances.
Decomposition temperature	: Not applicable.	

Viscosity (20°C)	:	Not known.	
Viscosity (40°C)	:	130 mm2/sec	
Vapour pressure (20°C)	:	Not known.	
Relative vapour density	:	> 1	(air = 1)
Relative density (20°C)	:	0,87 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: > 6,222 mg/l. Ingredients of unknown toxicity: 10 %. 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	:	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	:	Not classified - based on available data, the classification criteria are not met.
Sensitisation	:	May cause sensitisation by skin contact. May produce an allergic reaction.

Mutagenicity : Not expected to be mutagenic. 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: > 4286 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 expected to be an aspiration hazard. Contains a substance/substances with an aspiration hazard. Not classified - based on available data, the classification criteria are not met.

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 : 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
Polysulfides, di-tert-Bu	LD50 (oral)	> 2000 mg/kg bw	OECD 401	Rat
	LD50 (dermal)	> 2000 mg/kg bw	OECD 402	Rat
	Skin sensitisation	Sensitizing.	OECD 406	Guinea pig

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 : Toxic to aquatic organisms. Calculated LC50 (fish): 687 mg/l. Calculated EC50 (waterflea): 6 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
Polysulfides, di-tert-Bu	EC50 (waterflea) IC50 (algea) Ultimate aerobic biodegradation (%)	0,24 mg/l 0,838 mg/l 13 %	OECD 202 OECD 201 OECD 301 B	Daphnia magna Pseudokirchnerella subcapitata

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 3082

14.2. UN proper shipping name

Transport name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Polysulfides, di-tert-Bu)

Transport name (IMDG, IATA) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Polysulfides, di-tert-Bu)

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

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

Class : 9

Classification code : M6

Packaging group : III

Danger label : 9 + the “environmentally hazardous substance” mark.

Tunnel restriction code : (–)

:





Other information : Not intended for carriage by tank-vessels on inland waterways. This product is not regulated as a dangerous good when transported in sizes of <= 5 L or <= 5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8 (Special provisions 375).

IMDG (sea)

Class : 9

Packaging group	:	III
EmS (fire / spill)	:	F - A / S - F
Marine pollutant	:	Yes
Other information	:	This product is not regulated as a dangerous good when transported in sizes of <= 5 L or <= 5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8 (IMDG code 37-14, 2.10.2.7).

IATA (air)

Class	:	9
ERG code	:	9L
Packaging group	:	III

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. 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 (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	:	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
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 Sens. 1/1A/1B	:	Calculation method.
Aquatic Chronic 2	:	Calculation method.

Full text of hazard classes mentioned in section 3:

Skin Irrit. 2	:	Skin irritation, category 2.
Skin Sens. 1/1A/1B	:	Skin sensitization, category 1/1A/1B.
Aquatic Chronic 1	:	Hazardous to the aquatic environment — Chronic category 1.
Aquatic Chronic 3	:	Hazardous to the aquatic environment — Chronic category 3.
Aquatic Acute 1	:	Hazardous to the aquatic environment — Acute category 1.

Full text of H-phrases mentioned in section 3:

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
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.