

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

1.1. Product identifier

Product name : STAR BRITE STAR-TRON GASOLINE ADDITIVE
Product code : 930XX

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

Application : Fuel additives and fuel components.

1.3. Details of the supplier of the safety data sheet

Supplier : Star Brite
4041 SW 47th Avenue
33314 Fort Lauderdale, Florida, United States of America
Telephone : +1-954 587-6280
E-mail : info@starbrite.com
Website : http://www.starbrite.com

1.4. Emergency telephone number

EMERGENCY TELEPHONE NUMBER, for DOCTORS/FIRE BRIGADE/POLICE only:
US - Telephone : +1-703-527-3887 (During office hours only)
EMERGENCY TELEPHONE NUMBER (for DOCTORS only):
Chemtrec 001 703 5273887 (24/7)

SECTION 2 HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

GHS Classification (HCS §1910.1200) : Flammable liquid, category 4. Aspiration hazard, category 1.
Hazards not otherwise classified : Repeated exposure may cause skin dryness or cracking.

2.2. Label elements

Label elements (1910.1200)
Hazard pictograms :



Signal word : Danger
H- and P-phrases : H227 Combustible liquid.
H304 May be fatal if swallowed and enters airways.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
No smoking.
P280 face Wear protective gloves/eye protection/face protection.
hands
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P370+P378	In case of fire: Use carbondioxide, foam, dry chemical, water fog to extinguish.
P331	Do NOT induce vomiting.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container to an official chemical waste depot.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

3.2. Mixtures

Product description : Mixture.

Information on hazardous substances:

Substance name	Concentration (w/w%)	CAS nr.	Additional CAS nr.	Hazards
Hydrocarbons, C11-14, n-alkanes, isoalkanes, cyclics, < 2% aromatics	80 - 100	-----	64742-47-8	Flam. Liq. 4; H227 Asp. Tox. 1; H304
Distillates (petroleum), hydro- treated light	5 - <10	64742-47-8	-----	Flam. Liq. 3; H226 Asp. Tox. 1; H304 Skin Irrit. 2; H315 STOT SE 3; H336 Aquatic Chronic 2; H411

Occupational exposure limit(s), if relevant, are listed in section 8. The actual concentration has been withheld as a trade secret. Any concentration shown as a range is to protect confidentiality or is due to batch variations.

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 soup spoons of laxative (sodium sulphate). 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. |
| 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 (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 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.
NFPA hazard rating :



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. 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.

Workplace exposure limits (mg/m³):

Chemical name	Country	TWA 8 hour (mg/m3)	STEL 15 min (mg/m3)	Comments	Source
Hydrocarbons, C11-14, n-alkanes, isoalkanes, cyclics, < 2% aromatics	US	1200	-	Vapor. Total hydrocarbons.	CEPIC-HSPA
Distillates (petroleum), hydro-treated light	US	200	-	as total hydrocarbon vapor	ACGIH TLV

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.
- 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	Does not support combustion.
Flammability (solid, gas)	: Not applicable.	Liquid. See flashpoint.
Auto ignition temperature	: > 315 °C	
Boiling point/boiling range	: 148 °C	
Freezing point	: Not known.	
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 mm ² /sec	
Vapour pressure (20°C)	: Not known.	
Relative vapour density	: > 1	(air = 1)
Relative density (20°C)	: 0,8 g/ml	
Evaporation rate	: < 1	(n-butyl acetate = 1)

SECTION 10 STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity : See sub-sections below.

10.2. Chemical stability

Stability : Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reactivity : No other hazardous reactions known.

10.4. Conditions to avoid

Conditions to avoid : See section 7.

10.5. Incompatible materials

Materials to avoid : Keep away from 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: > 5000 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.

11.2. Information on other hazards

IARC	: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA	: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.
NTP	: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

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.

12.7. 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.
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

DOT (land)
Class : This product is not classified according to DOT.
Other information : Does not support combustion.
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

Regulations : OSHA HazCom 2012, 29 CFR 1910.1200 and other Regulations.

United States TSCA (Toxic Substances Control Act) inventory : All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

US State Regulation
California : This product does not contain any chemicals known to the State of California to cause cancer, birth, or
Proposition 65 any other reproductive effects.

SECTION 16 OTHER INFORMATION

16.1. Other information

The information in this safety data sheet is compiled in compliance with Hazcom 1910.1200. 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:

ATE	: Acute Toxicity Estimate
CMR	: Carcinogenic, Mutagenic or toxic for Reproduction
DOT	: Department of Transportation
DSL	: Domestic Substances List
GHS	: Globally Harmonized System of Classification and Labelling of Chemicals
HPA	: Hazardous Products Act
HPR	: Hazardous Products Regulations
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
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
OSHA	: United States Occupational Safety and Health Administration
PBT	: Persistent, Bioaccumulative and Toxic
REACH	: Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	: Regulations concerning the International Carriage of Dangerous Goods by Rail
STP	: Sewage Treatment Plant
TWA/STEL	: Time-Weighted Average/Short Term Exposure Limit
UN	: United Nations
VOC	: Volatile Organic Compounds



SAFETY DATA SHEET

According to OSHA HazCom 2012, 29 CFR 1910.1200

vPvB : Very Persistent and Very Bioaccumulative
WHMIS : Workplace Hazardous Materials Information System

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. Also used: OSHA HazCom 2012, 29 CFR 1910.1200.

Full text of H-phrases mentioned in section 3:

H226 Flammable liquid and vapour.
H227 Combustible liquid.
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.

Advice on any training appropriate for workers: none.

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

Date of preparation or : 2023-11-30
latest revision

End of safety data sheet.