

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

1.1. Product identifier

Product name : STAR BRITE INSTRUMENT AF 50/50
Product code : 337XX, 337G55

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

Application : Professional use. For industrial or institutional use. Antifreeze and de-icing products. Coolant.

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 2.

2.2. Label elements

Label elements (1910.1200)
Hazard pictograms :



Signal word : Danger

H- and P-phrases :

H225	Highly flammable liquid and vapour.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P280 face hands	Wear protective gloves/eye protection/face protection.

P370+P378	In case of fire: Use carbondioxide (CO ₂), alcohol resistant foam, dry chemical or water
alc	fog to extinguish.
P303+P361	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with
+P353	water/shower.
P403+P235	Store in a well-ventilated place. Keep cool.
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
Propylene glycol	30 - < 60	57-55-6	-----	-----
Ethanol	30 - < 60	64-17-5	-----	Flam. Liq. 2; H225 Eye Irrit. 2; H319

Occupational exposure limit(s), if relevant, are listed in section 8. The actual concentration has been withheld as a trade secret.

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.
- Eye contact : Wash out with (lukewarm) water. Remove contact lenses. Consult a doctor if irritation persists.
- Ingestion : Do not induce vomiting. Do rinse the mouth. Give one glass of water. 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 : No specific effects and/or symptoms are known.
- Eye contact : May cause stinging of eyes and redness.
- 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 (CO₂). Alcohol resistant 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 : None known.
 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.
 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. Keep away from sources of ignition — No smoking. 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.
 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. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Electrostatic discharge may cause fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Do not breathe vapour. Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Storage : Keep in a cool, dry and well-ventilated place (< 35 °C). Protect from sunlight. 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.

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/m ³)	STEL 15 min (mg/m ³)	Comments	Source
Propylene glycol	US	10	-	-	OARS WEEL
Ethanol	US	1900	-	-	OSHA

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.

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 with side shields 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 : Red.

Odour : Characteristic.

Odour threshold : Not known.

pH : 9

Solubility in water : Soluble.

Partition coefficient (n-octanol/water) : Not applicable. Not measured. Not relevant for mixtures.

Flash point : < 23 °C

Flammability (solid, gas) : Not applicable. Liquid. See flashpoint.

Auto ignition temperature : > 371 °C

Boiling point/boiling range : 78 °C

Freezing point : < 0 °C

Explosion limits (% in air) : Not known. Lower explosion limit in air (%): 2,6 (Propylene glycol)

: Upper explosion limit in air (%): 19 (Ethanol)

Oxidising properties : Not applicable. Does not contain oxidizing substances.

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	: Slight irritation possible. Not classified - based on available data, the classification criteria are not met.
Ingestion	
Acute toxicity	: Calculated LD50: > 3502 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. May cause hampered eyesight.
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 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.

11.2. Information on other hazards

Other information	: 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. No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens. 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.
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SECTION 12 ECOLOGICAL INFORMATION

12.1. Toxicity

No ecotoxicological research has been carried out on this product.

Ecotoxicity	: Calculated LC50 (fish): 5535 mg/l. Calculated EC50 (waterflea): 9889 mg/l. Contains 0 % of components with unknown hazards to the aquatic environment.
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12.2. Persistence and degradability

Persistence – degradability : No specific information known.

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.

12.7. 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 should be recycled or re-used. Treat product residues and non-empty pack as hazardous waste.
Additional warning	: Residues may cause an explosion hazard. Do not puncture, cut or weld uncleaned drums.

Waste water discharge : Do not dispose of into the environment, drains, sewers or water courses. Avoid discharge of waste water arising from tank cleaning to the environment.

EPA RCRA code : D0001

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 1170

14.2. UN proper shipping name

Transport name : ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
 Transport name (IMDG, IATA) : ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

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

DOT (land)

Class : 3
 Classification code : F1
 Packaging group : II
 Danger label : 3
 ERG number :



Other information : Not intended for carriage by tank-vessels on inland waterways. This product is exempted from labeling, specification packaging, shipping paper, and placarding requirements when shipped in inner packagings not over 1L, each package in strong outer packaging under 30 kg, unless shipped by aircraft or vessel.

IMDG (sea)

Class : 3
 Packaging group : II
 EmS (fire / spill) : F - E / S - D
 Marine pollutant : No

IATA (air)

Class : 3
 ERG code : 3L
 Packaging group : II

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 Proposition 65

WARNING: Contains traces of the following substances known to the state of California to cause cancer, birth defects or other reproductive harm

Chemical name	CAS	Type of toxicity	NSRL or MADL (ug/d)
Ethylene oxide	75-21-8	cancer	2

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
- 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:

H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.

Advice on any training appropriate for workers: none.

Number format : "," used as decimal separator.

Date of preparation or latest revision : 2023-03-28

End of safety data sheet.