

**1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**

Product name : STAR BRITE TOILET TREATMENT  
 Product code : 717XX  
 Application : Cleaning agent. Boat maintenance.  
 Supplier : Star brite Europe Inc.  
 30 rue F. Genin  
 69005 Lyon, France  
 Telephone : +33-472-570 133  
 Fax : +33-472-57 04 93  
 E-mail : jp.kitzinger@starbrite-europe.com  
 Website : www.starbrite-europe.com  
 Manufacturer : Star brite Distributing, Inc.  
 4041 S.W. 47 Avenue  
 Ft. Lauderdale, FL 33314, United States of America  
 Telephone : +1-954-587-6280

EMERGENCY TELEPHONE NUMBER, for DOCTORS/FIRE BRIGADE/POLICE only:  
 FR - Telephone :001-703-527-3887 - CHEMTREC

**2 HAZARDS IDENTIFICATION**

Classification : Irritant. Dangerous for the environment.  
 Human health hazards : Irritating to eyes and skin. May produce an allergic reaction.  
 Physical/chemical hazards : Not classified as dangerous according to statutory EC-Directives. Combustible.  
 Environmental hazards : Very toxic to aquatic organisms.  
 Other information : Keep out of the reach of children. Do not empty into drains. If swallowed, seek medical advice immediately and show this container or label.

**3 COMPOSITION / INFORMATION ON INGREDIENTS**

Product description : Preparation.

Information on hazardous substances:

Substance name	Concentration (w/w) (%)	CAS number	EC number	Symbols	R-phrases
N-Alkyl-(C12-C16)-N-benzyl-N,N-dimethylammonium chloride	5 - 10	68424-85-1	270-325-2	C, N	22-34-50
Ethanol	1 - 5	64-17-5	200-578-6	F	11
D-Limonene	0,1 - 1	5989-27-5	227-813-5	Xi, N	10-38-43-50/53

Reference is made to chapter 16 for full text of each relevant R phrase. Occupational exposure limit(s), if relevant, are listed in section 8.

**4 FIRST-AID MEASURES**

Effects and symptoms

Inhalation : May cause headache, dizziness and a feeling of sickness.  
 Skin contact : Irritant. May produce an allergic reaction. May cause dry skin and redness.  
 Eye contact : Irritant. May cause redness and pain.  
 Ingestion : May cause a feeling of sickness, vomiting and diarrhoea.

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 before product dries up. Consult a doctor if irritation occurs.
- Eye contact : Wash out with (lukewarm) water for at least 15 minutes. Remove contact lenses. Consult a doctor.
- Ingestion : Do not induce vomiting. Do rinse the mouth. Give one glass of water. Give condensed milk or a knob of butter. Never give anything by mouth to an unconscious person. Consult a doctor immediately.

<b>5 FIRE-FIGHTING MEASURES</b>
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- Extinguishing media
- Suitable : Carbondioxide (CO2). Foam. Dry chemical. Water fog.
- Not suitable : None known.
- Special exposure hazards : None known.
- Hazardous thermal decomposition products : Carbon monoxide may be evolved if incomplete combustion occurs.
- Special protective equipment for fire-fighters : Use adequate respiratory equipment in case of insufficient ventilation.

<b>6 ACCIDENTAL RELEASE MEASURES</b>	*
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- Personal precautions : Danger of slipping. Clean up spills immediately. Wear shoes with non-slip soles. Avoid contact with spilled or released material. See also section 8.
- Environmental precautions : Avoid release of product into sewers, surface water and/or ground water. Large spills: contain with dike. Waste product should not be allowed to contaminate soil or water.
- 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.
- Other information : Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

<b>7 HANDLING AND STORAGE</b>
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- 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.
- Storage : Keep frost-free, in a cool, dry and well-ventilated place (< 35 °C). Keep away from oxidizing agents.
- Recommended packaging : Keep only in the original container.
- Use : Use only as directed. Do not mix with other products.

<b>8 EXPOSURE CONTROLS/PERSONAL PROTECTION</b>
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- 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.
- Occupational exposure limits : Occupational exposure limits have not been established for this product.

Workplace exposure limits (mg/m<sup>3</sup>):

Chemical name	Country	TWA 8 hour	STEL 15 min	Comments
Ethanol	GB	1920	-	-

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 for momentary use. Wear suitable protective clothing, overalls or suit, and similar boots in accordance with EN 365/367 resp. 345 in case of frequent or prolonged use and in case of large scale exposure. Suitable material: rubber. Indication of permeation breakthrough time: not known.
- 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 suitable gloves in case of frequent or prolonged use and in case of large scale exposure in accordance with EN 374. Suitable material: rubber. Indication of permeation breakthrough time: not known.
- Eye protection : Wear appropriate safety glasses with side shields, in accordance with EN 166, when there is danger of possible eye contact.

**9 PHYSICAL AND CHEMICAL PROPERTIES**

- Appearance : Liquid.
- Colour : Blue.
- Odour : Perfumed.
- pH : 7
- Solubility in water : Soluble.
- Solubility in fat : Not known.
- Partition coefficient (n-octanol/water) : Not applicable.
- Flash point : 88 °C (PMcc)
- Auto ignition temperature : Not applicable.
- Boiling point/boiling range : 100 °C
- Melting point/melting range : 0 °C
- Explosion limits (in air) : Not applicable.
- Oxidising properties : Not applicable.
- Decomposition temperature : Not applicable.
- Viscosity (20°C) : Not known.
- Viscosity (40°C) : Not known.
- Vapour pressure (20°C) : Not known.
- Relative density (20°C) : 1 g/ml
- Evaporation rate : < 1 (n-butyl acetate = 1)

**10 STABILITY AND REACTIVITY**

- Stability : Stable under normal conditions.
- Conditions to avoid : See section 7.
- Materials to avoid : Keep away from oxidizing agents.
- Hazardous decomposition products : Not known.

**11 TOXICOLOGICAL INFORMATION**

No toxicological research has been carried out on this product.

- Inhalation : May cause headache, dizziness and a feeling of sickness.
- Skin contact : Irritant. May cause redness. Prolonged contact may dry out and defat the skin. May produce an allergic reaction.
- Eye contact : Irritant.
- Ingestion : May cause a feeling of sickness, vomiting and diarrhoea.

Toxicological information:

Chemical name	Property		Test animal	Method
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N-Alkyl-(C12-C16)-N-benzyl-N,N-dimethylammonium chloride	LD50 (oral)	426 mg/kg	Rat	----
	Skin irritation	Corrosive.	Rabbit	DOT
	Eye irritation	Corrosive.	Rabbit	DOT
	Mutagenicity	Negative	----	OECD 471
D-Limonene	LD50 (oral)	4400 mg/kg	Rat	----
	LD50 (dermal)	> 2000 mg/kg	Rabbit	----
	Skin irritation	Irritant.	----	----
	Skin sensitisation	10,075	Mouse	OECD 429

**12 ECOLOGICAL INFORMATION**

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No ecotoxicological research has been carried out on this product.

Ecotoxicity : Very toxic to aquatic organisms.

Mobility : If product enters soil, it will be highly mobile and may contaminate groundwater.

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.

Bio accumulative potential : No specific information known.

Ecological information:

Chemical name	Property		Test animal	Method
N-Alkyl-(C12-C16)-N-benzyl-N,N-dimethylammonium chloride	LC50 (fish)	0,515 (mg/l)	perche	US-EPA
	EC50 (waterflea)	0,0058 (mg/l)	Daphnia magna	US-EPA
	IC50 (alga)	0,049 (mg/l)	Selenastrum sp.	----
D-Limonene	BCF	79	----	----
	Log P(ow)	4,2	----	----
	Degradability	> 92	----	----

**13 DISPOSAL CONSIDERATIONS**

Product residues : Do not dispose empty pack with regular household waste. Treat product residues and non-empty pack as hazardous waste.

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.

**14 TRANSPORT INFORMATION**

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UN number : UN 3082

Transport name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( N-Alkyl-(C12-C16)-N-benzyl-N,N-dimethylammonium chloride )

ADR/RID (road / railway)

Class : 9

Classification code : M6

Packaging group : III

Danger label : 9



IMDG (sea)

Class : 9  
 Packaging group : III  
 EmS (fire / spill) : F - A / S - F  
 Marine pollutant : Yes



IATA (air)

Class : 9

Other information : Country variations may apply.

### 15 REGULATORY INFORMATION

Community regulations : EC Directive 67/548/EEC (substances), 99/45/EC (preparations) and other regulations.

Hazard symbols :



Xi: Irritant



N: Dangerous for the environment

R- and S-phrases :

R36/38	Irritating to eyes and skin.
R50	Very toxic to aquatic organisms.
S2	Keep out of the reach of children.
S29	Do not empty into drains.
S46	If swallowed, seek medical advice immediately and show this container or label.

Other information : The packaging shall carry the text: Contains: D-Limonene May produce an allergic reaction.

Ingredient declaration according to Regulation 648/2004:

Contains:	Concentration (%)
Cationic surfactants	5 - 15
Perfumes d-LIMONENE	

### 16 OTHER INFORMATION

The information in this safety data sheet is compiled in compliance with Regulation (EC) 1907/2006 dated 18 December 2006 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 (\*).

Full text of R-phrases mentioned in section 3:

R10	Flammable.
R11	Highly flammable.
R22	Harmful if swallowed.
R34	Causes burns.
R38	Irritating to skin.
R43	May cause sensitisation by skin contact.
R50	Very toxic to aquatic organisms.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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History

Date of first issue : 10-10-2005

Date of second issue : 18-12-2009

Herewith all previous issues are expired.