



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** Starbrite Toilet Treatment Lemon

**Other means of identification**

**Product code** 717-LEMON

**Recommended use** Toilet Treatment.

**Recommended restrictions** None known.

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health Hazards** Skin corrosion/irritation Category 1C  
Serious eye damage/eye irritation Category 1

**Environmental hazards** Hazardous to the aquatic environment, acute hazard Category 1

**OSHA defined hazards** Not classified.

**Label elements**



**Signal word** Danger

**Hazard statement** Causes severe skin burns and eye damage. Very toxic to aquatic life.

### Precautionary statement

**Prevention** Do not breathe mist or vapor. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Avoid release to the environment.

**Response** If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. Collect spillage.

**Storage** Store locked up.

**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.

**Hazard(s) not otherwise classified (HNOC)** None known.

## 3. Composition/information on ingredients

### Mixtures

| Chemical name  | CAS number | %    |
|--|------------|------|
| N-Alkyl-(C12-C18)-N-benzyl-N,N-dimethylammonium chloride | 68391-01-5 | < 10 |

#### 4. First-aid measures

|   |   |
|---|---|
| <b>Inhalation</b>   | If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms persist.   |
| <b>Skin contact</b>   | Remove and isolate contaminated clothing and shoes. Immediately flush skin with plenty of water. Get medical attention immediately. For minor skin contact, avoid spreading material on unaffected skin. Wash clothing separately before reuse. |
| <b>Eye contact</b>  | Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.   |
| <b>Ingestion</b>  | Rinse mouth thoroughly. Call a physician or poison control center immediately. Do not induce vomiting without advice from poison control center.  |
| <b>Most important symptoms/effects, acute and delayed</b>                     | Causes skin and eye burns.  |
| <b>Indication of immediate medical attention and special treatment needed</b> | Treat symptomatically.  |

#### 5. Fire-fighting measures

|  |   |
|--|---|
| <b>Suitable extinguishing media</b>                                  | Water. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).   |
| <b>Unsuitable extinguishing media</b>                                | None known.   |
| <b>Specific hazards arising from the chemical</b>                    | During fire, gases hazardous to health may be formed.   |
| <b>Special protective equipment and precautions for firefighters</b> | Self-contained breathing apparatus, operated in positive pressure mode and full protective clothing must be worn in case of fire. |
| <b>Fire fighting equipment/instructions</b>                          | Move containers from fire area if you can do it without risk.   |
| <b>Specific methods</b>  | Use water spray to cool unopened containers.  |

#### 6. Accidental release measures

|  |   |
|--|---|
| <b>Personal precautions, protective equipment and emergency procedures</b> | Wear protective clothing as described in Section 8 of this safety data sheet. Ensure adequate ventilation. Ventilate closed spaces before entering them. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.  |
| <b>Methods and materials for containment and cleaning up</b>               | Stop the flow of material, if this is without risk. Prevent entry into waterways, sewers, basements or confined areas. Dike the spilled material, where this is possible. Collect spillage. Do not allow material to contaminate ground water system.<br><br>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece).<br><br>Large Spills: Dike far ahead of spill for later disposal. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.<br><br>Never return spills to original containers for re-use. Following product recovery, flush area with water. This material and its container must be disposed of as hazardous waste. Clean up in accordance with all applicable regulations. |
| <b>Environmental precautions</b>   | Prevent further leakage or spillage if safe to do so. Do not contaminate water.   |

#### 7. Handling and storage

|   |  |
|---|--|
| <b>Precautions for safe handling</b>                                | Do not get in eyes, on skin, on clothing. Do not breathe mist or vapor. Do not eat, drink or smoke when using the product. Do not use in areas without adequate ventilation. Wear personal protective equipment. Avoid prolonged exposure. Wash thoroughly after handling. Avoid release to the environment. Do not empty into drains. |
| <b>Conditions for safe storage, including any incompatibilities</b> | Keep locked-up. Store in a well-ventilated place. Keep container tightly closed. Store in a closed container away from incompatible materials. Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs.   |

#### 8. Exposure controls/personal protection

|                                     |   |
|-------------------------------------|---|
| <b>Occupational exposure limits</b> | No exposure limits noted for ingredient(s). |
|-------------------------------------|---|

|  |   |
|--|---|
| <b>Biological limit values</b>   | No biological exposure limits noted for the ingredient(s).  |
| <b>Appropriate engineering controls</b>                                      | Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors.   |
| <b>Individual protection measures, such as personal protective equipment</b> |   |
| <b>Eye/face protection</b>   | Use approved safety goggles or face shield.   |
| <b>Skin protection</b>   |   |
| <b>Hand protection</b>   | Wear appropriate chemical resistant gloves.   |
| <b>Other</b>   | Wear suitable protective clothing.  |
| <b>Respiratory protection</b>  | In case of inadequate ventilation, use respiratory protection.  |
| <b>Thermal hazards</b>   | Not available.  |
| <b>General hygiene considerations</b>  | Do not get this material in your eyes, on your skin, or on your clothing. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. |

## 9. Physical and chemical properties

|   |                                  |
|---|----------------------------------|
| <b>Appearance</b>                                   | Blue liquid with odor of lemons. |
| <b>Physical state</b>                               | Liquid.                          |
| <b>Form</b>   | Liquid.                          |
| <b>Color</b>  | Blue.                            |
| <b>Odor</b>   | Lemon.                           |
| <b>Odor threshold</b>                               | Not available.                   |
| <b>pH</b>   | 7                                |
| <b>Melting point/freezing point</b>                 | Not available.                   |
| <b>Initial boiling point and boiling range</b>      | Not available.                   |
| <b>Flash point</b>                                  | > 212.0 °F (> 100.0 °C)          |
| <b>Evaporation rate</b>                             | Not available.                   |
| <b>Flammability (solid, gas)</b>                    | Not available.                   |
| <b>Upper/lower flammability or explosive limits</b> |                                  |
| <b>Flammability limit - lower (%)</b>               | Not available.                   |
| <b>Flammability limit - upper (%)</b>               | Not available.                   |
| <b>Explosive limit - lower (%)</b>                  | Not available.                   |
| <b>Explosive limit - upper (%)</b>                  | Not available.                   |
| <b>Vapor pressure</b>                               | Not available.                   |
| <b>Vapor density</b>                                | Not available.                   |
| <b>Relative density</b>                             | Not available.                   |
| <b>Solubility(ies)</b>                              |                                  |
| <b>Solubility (water)</b>                           | Completely soluble in water.     |
| <b>Partition coefficient (n-octanol/water)</b>      | Not available.                   |
| <b>Auto-ignition temperature</b>                    | Not available.                   |
| <b>Decomposition temperature</b>                    | Not available.                   |
| <b>Viscosity</b>                                    | Not available.                   |

## 10. Stability and reactivity

|   |   |
|---|---|
| <b>Reactivity</b>                         | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| <b>Chemical stability</b>                 | Material is stable under normal conditions.   |
| <b>Possibility of hazardous reactions</b> | Hazardous polymerization does not occur.  |
| <b>Conditions to avoid</b>                | Contact with incompatible materials.  |
| <b>Incompatible materials</b>             | Oxidizing agents.   |

**Hazardous decomposition products** No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

**Inhalation** May cause slight respiratory tract irritation.  
**Skin contact** Causes skin burns.  
**Eye contact** Causes eye burns.  
**Ingestion** May have a corrosive effect on the digestive canal.

**Symptoms related to the physical, chemical and toxicological characteristics** Causes skin and eye burns. May cause respiratory irritation.

### Information on toxicological effects

**Acute toxicity** May have a corrosive effect on the digestive canal.

| Components  | Species  | Test Results |
|---|--|--------------|
| N-Alkyl-(C12-C18)-N-benzyl-N,N-dimethylammonium chloride (CAS 68391-01-5) |  |              |
| <b>Acute</b>  |  |              |
| <i>Dermal</i>   |  |              |
| LD50  | Rat  | 1420 mg/kg   |
| <i>Oral</i>   |  |              |
| LD50  | Rat  | 240 mg/kg    |
| <b>Skin corrosion/irritation</b>  | Causes skin burns.   |              |
| <b>Serious eye damage/eye irritation</b>                                  | Causes eye burns.  |              |
| <b>Respiratory or skin sensitization</b>                                  |  |              |
| <b>Respiratory sensitization</b>  | Not classified.  |              |
| <b>Skin sensitization</b>   | Not classified.  |              |
| <b>Germ cell mutagenicity</b>   | Not classified.  |              |
| <b>Carcinogenicity</b>  | This product is not considered to be a carcinogen by NTP, IARC, or OSHA. |              |
| <b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>     |  |              |
| Not listed.   |  |              |
| <b>Reproductive toxicity</b>  | Not classified.  |              |
| <b>Specific target organ toxicity - single exposure</b>                   | Not classified.  |              |
| <b>Specific target organ toxicity - repeated exposure</b>                 | Not classified.  |              |
| <b>Aspiration hazard</b>  | Not classified.  |              |

## 12. Ecological information

**Ecotoxicity** Very toxic to aquatic life.

| Components  | Species  | Test Results                |
|---|--|-----------------------------|
| N-Alkyl-(C12-C18)-N-benzyl-N,N-dimethylammonium chloride (CAS 68391-01-5) |  |                             |
| <b>Aquatic</b>  |  |                             |
| Fish  | LC50<br>Rainbow trout,donaldson trout<br>(Oncorhynchus mykiss) | 0.823 - 1.61 mg/l, 96 hours |
| <b>Persistence and degradability</b>                                      | Not established.   |                             |
| <b>Bioaccumulative potential</b>  | Not established.   |                             |
| <b>Mobility in soil</b>   | Not established.   |                             |
| <b>Other adverse effects</b>  | Not established.   |                             |

## 13. Disposal considerations

**Disposal instructions** Dispose of contents/container in accordance with local/regional/national/international regulations.

|  |   |
|--|---|
| <b>Hazardous waste code</b>                  | Waste codes should be assigned by the user based on the application for which the product was used.     |
| <b>Waste from residues / unused products</b> | Dispose of waste and residues in accordance with local authority requirements.                          |
| <b>Contaminated packaging</b>                | Since emptied containers retain product residue, follow label warnings even after container is emptied. |

## 14. Transport information

### DOT

|                                     |  |
|-------------------------------------|--|
| <b>UN number</b>                    | UN1760   |
| <b>UN proper shipping name</b>      | Corrosive liquids, n.o.s. (N-Alkyl-(C12-C18)-N-benzyl-N,N-dimethylammonium chloride) |
| <b>Transport hazard class(es)</b>   |  |
| <b>Class</b>                        | 8  |
| <b>Subsidiary risk</b>              | -  |
| <b>Label(s)</b>                     | 8  |
| <b>Packing group</b>                | III  |
| <b>Environmental hazards</b>        |  |
| <b>Marine pollutant</b>             | Yes  |
| <b>Special precautions for user</b> | Not available.   |
| <b>Special provisions</b>           | IB3, T7, TP1, TP28   |
| <b>Packaging exceptions</b>         | 154  |
| <b>Packaging non bulk</b>           | 203  |
| <b>Packaging bulk</b>               | 241  |

### IATA

|                                     |   |
|-------------------------------------|---|
| <b>UN number</b>                    | UN1760  |
| <b>UN proper shipping name</b>      | Corrosive liquid, n.o.s. (N-Alkyl-(C12-C18)-N-benzyl-N,N-dimethylammonium chloride) |
| <b>Transport hazard class(es)</b>   |   |
| <b>Class</b>                        | 8   |
| <b>Subsidiary risk</b>              | -   |
| <b>Packing group</b>                | III   |
| <b>Environmental hazards</b>        | Yes   |
| <b>ERG Code</b>                     | 8L  |
| <b>Special precautions for user</b> | Not available.  |

### IMDG

|                                     |   |
|-------------------------------------|---|
| <b>UN number</b>                    | UN1760  |
| <b>UN proper shipping name</b>      | CORROSIVE LIQUID, N.O.S. (N-Alkyl-(C12-C18)-N-benzyl-N,N-dimethylammonium chloride) |
| <b>Transport hazard class(es)</b>   |   |
| <b>Class</b>                        | 8   |
| <b>Subsidiary risk</b>              | -   |
| <b>Packing group</b>                | III   |
| <b>Environmental hazards</b>        |   |
| <b>Marine pollutant</b>             | Yes   |
| <b>EmS</b>                          | F-A, S-B  |
| <b>Special precautions for user</b> | Not available.  |

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** This substance/mixture is not intended to be transported in bulk.

**General information** This product meets the limited quantities exception as follows:  
DOT / IMDG: Limited quantities up to 5 liters.  
Otherwise, the above descriptions apply.

## 15. Regulatory information

**US federal regulations** This product is hazardous according to OSHA 29 CFR 1910.1200.

### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

## Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical** Yes

**SARA 313 (TRI reporting)**  
Not regulated.

## Other federal regulations

### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

## US state regulations

### US. Massachusetts RTK - Substance List

Not regulated.

### US. New Jersey Worker and Community Right-to-Know Act

Not listed.

### US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

### US. Rhode Island RTK

Not regulated.

### US. California Proposition 65

#### US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Not listed.

## International Inventories

| Country(s) or region        | Inventory name   | On inventory (yes/no)* |
|-----------------------------|--|------------------------|
| Australia                   | Australian Inventory of Chemical Substances (AICS)                     | Yes                    |
| Canada                      | Domestic Substances List (DSL)   | Yes                    |
| Canada                      | Non-Domestic Substances List (NDSL)                                    | No                     |
| China                       | Inventory of Existing Chemical Substances in China (IECSC)             | Yes                    |
| Europe                      | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes                    |
| Europe                      | European List of Notified Chemical Substances (ELINCS)                 | No                     |
| Japan                       | Inventory of Existing and New Chemical Substances (ENCS)               | Yes                    |
| Korea                       | Existing Chemicals List (ECL)  | Yes                    |
| New Zealand                 | New Zealand Inventory  | Yes                    |
| Philippines                 | Philippine Inventory of Chemicals and Chemical Substances (PICCS)      | Yes                    |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory                          | Yes                    |

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date** 15-May-2014  
**Revision date** 16-October-2014  
**Version #** 04  
**Further information** HMIS® is a registered trade and service mark of the NPCA.

**HMIS® ratings**

Health: 3  
Flammability: 0  
Physical hazard: 0

**References**

ACGIH  
EPA: AQUIRE database  
NLM: Hazardous Substances Data Base  
US. IARC Monographs on Occupational Exposures to Chemical Agents  
HSDB® - Hazardous Substances Data Bank  
IARC Monographs. Overall Evaluation of Carcinogenicity  
National Toxicology Program (NTP) Report on Carcinogens  
ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices

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