SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Sure White
< 500 ml

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

Relevant identified uses of the substance or mixture:
It is a medical product

Uses advised against:
No information available at present.

1.3 Details of the supplier of the safety data sheet

OraMetrix GmbH, Rungestraße 19, 10179 Berlin, Germany
Phone: +49.(0)30.243 091-0, Fax: +49.(0)30.243 091-10

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de  Please DO NOT use for requesting Safety Data Sheets.

1.4 Emergency telephone number

Emergency information services / official advisory body:
+49 30 30686 790 (Berlin)

Telephone number of the company in case of emergencies:
+49 (0) 700 / 24 112 112 (OMR)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) 1272/2008 (CLP)

<table>
<thead>
<tr>
<th>Flam. Liq.</th>
<th>Hazard category</th>
<th>Hazard statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td></td>
<td>H225-Highly flammable liquid and vapour.</td>
</tr>
<tr>
<td>Eye Irrit.</td>
<td>2</td>
<td>H319-Causes serious eye irritation.</td>
</tr>
</tbody>
</table>

2.2 Label elements

Labeling according to Regulation (EC) 1272/2008 (CLP)

Danger

H225-Highly flammable liquid and vapour. H319-Causes serious eye irritation.
P210-Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P280-Wear eye protection.
P337+P313-If eye irritation persists: Get medical advice/attention.

2.3 Other hazards
The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006.
The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006.

SECTION 3: Composition/information on ingredients

3.1 Substance
n.a.
3.2 Mixture
Ethanol

<table>
<thead>
<tr>
<th>Substance with specific conc. limit(s) acc. to REACh-registration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration number (REACH)</td>
</tr>
<tr>
<td>Index</td>
</tr>
<tr>
<td>EINECS, ELINCS, NLP</td>
</tr>
<tr>
<td>CAS</td>
</tr>
<tr>
<td>content %</td>
</tr>
<tr>
<td>Classification according to Regulation (EC) 1272/2008 (CLP)</td>
</tr>
<tr>
<td>Flam. Liq. 2, H225</td>
</tr>
<tr>
<td>Eye Irrit. 2, H319</td>
</tr>
</tbody>
</table>

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.
The substances named in this section are given with their actual, appropriate classification!
For substances that are listed in appendix VI, table 3.1/3.2 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation
Remove person from danger area.
Supply person with fresh air and consult doctor according to symptoms.
If the person is unconscious, place in a stable side position and consult a doctor.

Skin contact
Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

Eye contact
Remove contact lenses. Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

Ingestion
Rinse the mouth thoroughly with water.
Give copious water to drink - consult doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed
If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.
In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

4.3 Indication of any immediate medical attention and special treatment needed
n.c.

SECTION 5: Firefighting measures
5.1 Extinguishing media

Suitable extinguishing media
Water jet spray / alcohol resistant foam / CO2 / dry extinguisher

Unsuitable extinguishing media
High volume water jet

5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop:
- Oxides of carbon
- Toxic gases
- Explosive vapour/air mixture

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes.
Protective respirator with independent air supply.
According to size of fire
Full protection, if necessary.
Cool container at risk with water.
Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep unprotected persons away.
Ensure sufficient supply of air.
Remove possible causes of ignition - do not smoke.
Avoid inhalation, and contact with eyes or skin.
If applicable, caution - risk of slipping.

6.2 Environmental precautions

If leakage occurs, dam up.
Resolve leaks if this possible without risk.
Prevent surface and ground-water infiltration, as well as ground penetration.
Prevent penetration into drains, cellars, working pits or other places in which accumulation could be hazardous.
If accidental entry into drainage system occurs, inform responsible authorities.

6.3 Methods and material for containment and cleaning up

Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth, sawdust) and dispose of according to Section 13.
Flush residue using copious water.

6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

7.1 Precautions for safe handling

7.1.1 General recommendations

Ensure good ventilation.
Avoid inhalation of the vapours.
Keep away from sources of ignition - Do not smoke.
Take measures against electrostatic charging, if appropriate.
Avoid contact with eyes or skin.
Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.
Observe directions on label and instructions for use.
Use working methods according to operating instructions.

7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.
Wash hands before breaks and at end of work.
Keep away from food, drink and animal feedingstuffs.
Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

7.2 Conditions for safe storage, including any incompatibilities
Keep out of access to unauthorised individuals.
Not to be stored in gangways or stair wells.
Store product closed and only in original packing.
Observe special storage conditions (in Germany, e.g., in accordance with the regulations in the "Betriebssicherheitsverordnung").
Do not store with flammable or self-igniting materials.
Protect from direct sunlight and warming.
Store in a well-ventilated place.
Store cool.

7.3 Specific end use(s)
No information available at present.

**SECTION 8: Exposure controls/personal protection**

8.1 Control parameters

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Ethanol</th>
<th>Content %: 70-90</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WEL-TWA:</td>
<td>1000 ppm (1920 mg/m3)</td>
<td>WEL-STEL: ---</td>
</tr>
<tr>
<td>Monitoring procedures:</td>
<td>- Compur - KITA-T04 SA (549 210)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Draeger - Alcohol 25/a Ethanol (81 01 631)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- DFG (D) (Losungsmittelgemische), Methode Nr. 6 DFG (E) (Solvent mixtures) - 1998, 2002 - EU project BC/CEN/ENTR/000/2002-16 card 63-2 (2004)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Draeger - Alcohol 25/a (81 01 631)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Draeger - Alcohol 100/a (CH 29 701)</td>
<td></td>
</tr>
<tr>
<td>BMGV:</td>
<td>---</td>
<td>Other information: ---</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Titanium dioxide</th>
<th>Content %:</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEL-TWA:</td>
<td>10 mg/m3 (total inhalable dust), 4 mg/m3 (respirable dust)</td>
<td>WEL-STEL: ---</td>
</tr>
<tr>
<td>Monitoring procedures:</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>BMGV:</td>
<td>---</td>
<td>Other information: ---</td>
</tr>
</tbody>
</table>

* WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage. ** = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.

<table>
<thead>
<tr>
<th>Area of application</th>
<th>Exposure route / Environmental compartment</th>
<th>Effect on health</th>
<th>Descriptor</th>
<th>Value</th>
<th>Unit</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workers / employees</td>
<td>Human - inhalation</td>
<td>Short term, local effects</td>
<td>DNEL</td>
<td>1900</td>
<td>mg/m3</td>
<td></td>
</tr>
<tr>
<td>Workers / employees</td>
<td>Human - inhalation</td>
<td>Long term, systemic effects</td>
<td>DNEL</td>
<td>950</td>
<td>mg/m3</td>
<td></td>
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<tr>
<td>Workers / employees</td>
<td>Human - dermal</td>
<td>Long term, systemic effects</td>
<td>DNEL</td>
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<td>mg/kg</td>
<td>bw/d</td>
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<tr>
<td>Consumer</td>
<td>Human - inhalation</td>
<td>Short term, local effects</td>
<td>DNEL</td>
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<td>mg/m3</td>
<td></td>
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<tr>
<td>Consumer</td>
<td>Human - dermal</td>
<td>Short term, local effects</td>
<td>DNEL</td>
<td>950</td>
<td>mg/m3</td>
<td></td>
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<td>Human - inhalation</td>
<td>Long term, systemic effects</td>
<td>DNEL</td>
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<td>Human - oral</td>
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<td>DNEL</td>
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<tr>
<td>Consumer</td>
<td>Human - dermal</td>
<td>Long term, systemic effects</td>
<td>DNEL</td>
<td>206</td>
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<td>bw/d</td>
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<tr>
<td>Environment - freshwater</td>
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<td>PNEC</td>
<td>0.96</td>
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<tr>
<td>Environment - marine</td>
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<td>PNEC</td>
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</table>
Titanium dioxide

<table>
<thead>
<tr>
<th>Area of application</th>
<th>Exposure route / Environmental compartment</th>
<th>Effect on health</th>
<th>Descriptor</th>
<th>Value</th>
<th>Unit</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workers / employees</td>
<td>Human - inhalation</td>
<td>Long term, local effects</td>
<td>DNEL</td>
<td>10</td>
<td>mg/m³</td>
<td></td>
</tr>
<tr>
<td>Consumer</td>
<td>Human - oral</td>
<td>Long term, systemic effects</td>
<td>DNEL</td>
<td>700</td>
<td>mg/kg</td>
<td></td>
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<tr>
<td></td>
<td>Environment - freshwater</td>
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<td>PNEC</td>
<td>0.127</td>
<td>mg/l</td>
<td></td>
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<tr>
<td></td>
<td>Environment - marine</td>
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<td>PNEC</td>
<td>1</td>
<td>mg/l</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environment - water, sporadic (intermittent) release</td>
<td></td>
<td>PNEC</td>
<td>0.61</td>
<td>mg/l</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environment - sewage treatment plant</td>
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<td>PNEC</td>
<td>100</td>
<td>mg/l</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environment - sediment, freshwater</td>
<td></td>
<td>PNEC</td>
<td>1000</td>
<td>mg/kg</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environment - sediment, marine</td>
<td></td>
<td>PNEC</td>
<td>100</td>
<td>mg/kg</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environment - soil</td>
<td></td>
<td>PNEC</td>
<td>100</td>
<td>mg/kg</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environment - oral (animal feed)</td>
<td></td>
<td>PNEC</td>
<td>1667</td>
<td>mg/kg</td>
<td>feed</td>
</tr>
</tbody>
</table>

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.

If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.

Applies only if maximum permissible exposure values are listed here.

8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:

Tight fitting protective goggles with side protection (EN 166).

Skin protection - Hand protection:

Chemical resistant protective gloves (EN 374).

If applicable

Safety gloves made of butyl (EN 374)

Protective Neoprene® / polychloroprene gloves (EN 374).

Protective nitrile gloves (EN 374)

Minimum layer thickness in mm:

>= 0.4

Permeation time (penetration time) in minutes:
> 480
The breakthrough times determined in accordance with EN 374 Part 3 were not obtained under practical conditions.
The recommended maximum wearing time is 50% of breakthrough time.
Protective hand cream recommended.

Skin protection - Other:
Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments).

Respiratory protection:
If OES or MEL is exceeded.
Filter A (EN 14387), code colour brown
Observe wearing time limitations for respiratory protection equipment.

Thermal hazards:
Not applicable

Additional information on hand protection - No tests have been performed.
In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents.
Selection of materials derived from glove manufacturer's indications.
Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.
Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer
to manufacturer.
In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.
The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

8.2.3 Environmental exposure controls
No information available at present.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state: Liquid
Colour: Transparent
Odour: Alcoholic
Odour threshold: Not determined
pH-value: Not determined
Melting point/freezing point: -114 °C (Ethanol)
Initial boiling point and boiling range: 78 °C (Ethanol)
Flash point: 7 °C (DIN 51755 (Abel-Pensky, closed cup))
Evaporation rate: Not determined
Flammability (solid, gas): n.a.
Lower explosive limit: 3,5 Vol-% (Ethanol)
Upper explosive limit: 15 Vol-% (Ethanol)
Vapour pressure: Not determined
Vapour density (air = 1): 0,8 g/ml
Density: n.a.
Bulk density: Not determined
Solubility(ies): Soluble
Water solubility: -0,32 (Ethanol)
Partition coefficient (n-octanol/water):
Auto-ignition temperature: 425 °C (Ignition temperature Ethanol)
Decomposition temperature: Not determined
Viscosity: Not determined
Explosive properties: When using: development of explosive vapour/air mixture possible.
Oxidising properties: No
SECTION 10: Stability and reactivity

10.1 Reactivity
The product has not been tested.

10.2 Chemical stability
Stable with proper storage and handling.

10.3 Possibility of hazardous reactions
No dangerous reactions are known.

10.4 Conditions to avoid
See also section 7.
Heating, open flame, ignition sources

10.5 Incompatible materials
See also section 7.
Avoid contact with strong oxidizing agents.
Avoid contact with strong acids.

10.6 Hazardous decomposition products
See also section 5.2
No decomposition when used as directed.

SECTION 11: Toxicological information

Possibly more information on health effects, see Section 2.1 (classification).

<table>
<thead>
<tr>
<th>Sure White</th>
<th>&lt; 500 ml</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity / effect</td>
<td>Endpoint</td>
</tr>
<tr>
<td>Acute toxicity, by dermal route:</td>
<td>n.d.a.</td>
</tr>
<tr>
<td>Acute toxicity, by inhalation:</td>
<td>n.d.a.</td>
</tr>
<tr>
<td>Skin corrosion/irritation:</td>
<td>n.d.a.</td>
</tr>
<tr>
<td>Serious eye damage/irritation:</td>
<td>n.d.a.</td>
</tr>
<tr>
<td>Respiratory or skin sensitisation:</td>
<td>n.d.a.</td>
</tr>
<tr>
<td>Germ cell mutagenicity:</td>
<td>n.d.a.</td>
</tr>
<tr>
<td>Carcinogenicity:</td>
<td>n.d.a.</td>
</tr>
<tr>
<td>Reproductive toxicity:</td>
<td>n.d.a.</td>
</tr>
<tr>
<td>Aspiration hazard:</td>
<td>n.d.a.</td>
</tr>
<tr>
<td>Symptoms:</td>
<td>n.d.a.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethanol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity / effect</td>
</tr>
<tr>
<td>Acute toxicity, by oral route:</td>
</tr>
<tr>
<td>Acute toxicity, by dermal route:</td>
</tr>
<tr>
<td>Acute toxicity, by inhalation:</td>
</tr>
<tr>
<td>Skin corrosion/irritation:</td>
</tr>
</tbody>
</table>
**Safety data sheet according to Regulation (EC) No 1907/2006, Annex II**

**Revision date / version:** 24.08.2015 / 0002  
**Replacing version dated / version:** 21.10.2009 / 0001  
**Valid from:** 24.08.2015  
**PDF print date:** 25.09.2015  

**Sure White**  
< 500 ml

**Serious eye damage/irritation:**
- Rabbit: OECD 405 (Acute Eye Irritation/Corrosion)  
  - Mild irritant

**Respiratory or skin sensitisation:**
- Mouse: OECD 429 (Skin Sensitisation - Local Lymph Node Assay)  
  - Not sensitising

**Germ cell mutagenicity:**
- OECD 471 (Bacterial Reverse Mutation Test)  
  - Negative

**Germ cell mutagenicity:**
- OECD 473 (In Vitro Mammalian Chromosome Aberration Test)  
  - Negative

**Germ cell mutagenicity:**
- OECD 475 (Mammalian Bone Marrow Chromosome Aberration Test)  
  - Negative

**Germ cell mutagenicity:**
- Mouse: OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)  
  - Negative

**Germ cell mutagenicity:**
- Salmonella typhimurium: OECD 471 (Bacterial Reverse Mutation Test)  
  - Negative

**Carcinogenicity:**
- NOAEL: >3000 mg/kg Rat  
  - OECD 451 (Carcinogenicity Studies)  
  - 24 mon

**Reproductive toxicity:**
- NOAEL: 5200 mg/kg bw/d Rat  

**Specific target organ toxicity - repeated exposure (STOT-RE):**
- NOAEL: 1730 mg/kg/d Rat  
  - OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)  
  - Female

**Specific target organ toxicity - repeated exposure (STOT-RE):**
- NOAL: >20 mg/l Rat  
  - OECD 403 (Acute Inhalation Toxicity)  
  - Male

**Aspiration hazard:**
- Human being  
  - No indications of such an effect.

**Symptoms:**
- Respiratory distress, drowsiness, unconsciousness, drop in blood pressure, vomiting, coughing, headaches, intoxication, drowsiness, mucous membrane irritation, dizziness, nausea

**Experiences in humans:**
- Excessive alcohol consumption during pregnancy induces the foetus alcohol syndrome (reduced weight at birth, physical and mental disorders). There is no sign that this syndrome is also caused by dermal or inhalative absorption.

---

**Titanium dioxide**

<table>
<thead>
<tr>
<th>Toxicity / effect</th>
<th>Endpoint</th>
<th>Value</th>
<th>Unit</th>
<th>Organism</th>
<th>Test method</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Acute toxicity, by oral route:  
LD50 >5000 mg/kg Rat  
OECD 425 (Acute Oral Toxicity - Up-and-Down Procedure)

Acute toxicity, by dermal route:  
LD50 >5000 mg/kg Rabbit

Acute toxicity, by inhalation:  
LD50 >6.8 mg/l/4h Rat

Skin corrosion/irritation:  
LD50  
Rabbit  
OECD 404 (Acute Dermal Irritation/Corrosion)  
Not irritant

Serious eye damage/irritation:  
OECD 405 (Acute Eye Irritation/Corrosion)  
Not irritant, Mechanical irritation possible.

Respiratory or skin sensitisation:  
Mouse  
OECD 429 (Skin Sensitisation - Local Lymph Node Assay)  
Not sensitising

Respiratory or skin sensitisation:  
Guinea pig  
OECD 406 (Skin Sensitisation)  
Not sensitising

Germ cell mutagenicity:  
Salmonella typhimurium  
OECD (Ames-Test)  
Negative

Specific target organ toxicity - single exposure (STOT-SE):  
NOAEL 3500 mg/kg/d Rat  
90d

Specific target organ toxicity - repeated exposure (STOT-RE), oral:  
NOAEL  

Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.:  
NOAEC 10 mg/m3 Rat  
90 d

SECTION 12: Ecological information

Possibly more information on environmental effects, see Section 2.1 (classification).

<table>
<thead>
<tr>
<th>Sure White</th>
<th>&lt; 500 ml</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity / effect</td>
<td>Endpoint</td>
</tr>
<tr>
<td>Toxicity to fish:</td>
<td></td>
</tr>
<tr>
<td>Toxicity to daphnia:</td>
<td></td>
</tr>
<tr>
<td>Toxicity to algae:</td>
<td></td>
</tr>
<tr>
<td>Persistence and degradability:</td>
<td></td>
</tr>
<tr>
<td>Bioaccumulative potential:</td>
<td></td>
</tr>
<tr>
<td>Mobility in soil:</td>
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</tr>
<tr>
<td>Results of PBT and vPvB assessment</td>
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</tr>
<tr>
<td>Other adverse effects:</td>
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<table>
<thead>
<tr>
<th>Ethanol</th>
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<tbody>
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<td>Toxicity / effect</td>
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<tr>
<td>Toxicity to daphnia:</td>
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<td>Toxicity to algae:</td>
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</tbody>
</table>
Persistence and degradability:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>%</th>
<th>OECD 301 B (Ready Biodegradability - Co2 Evolution Test)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bioaccumulative potential:</td>
<td>BCF</td>
<td>0.66 - 3.2</td>
<td></td>
</tr>
<tr>
<td>Bioaccumulative potential:</td>
<td>Log Pow</td>
<td>-0.32</td>
<td>Bioaccumulation is unlikely (LogPow &lt; 1).</td>
</tr>
<tr>
<td>Mobility in soil:</td>
<td>H (Henry)</td>
<td>0.0001 38</td>
<td></td>
</tr>
</tbody>
</table>

Results of PBT and vPvB assessment: No PBT substance, No vPvB substance

<table>
<thead>
<tr>
<th>Titanium dioxide</th>
<th>Endpoint</th>
<th>Time</th>
<th>Value</th>
<th>Unit</th>
<th>Organism</th>
<th>Test method</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity to fish:</td>
<td>LC50</td>
<td>96h</td>
<td>&gt;100</td>
<td>mg/l</td>
<td>Oncorhynchus mykiss</td>
<td>OECD 203 (Fish, Acute Toxicity Test)</td>
<td></td>
</tr>
<tr>
<td>Toxicity to daphnia:</td>
<td>LC50</td>
<td>48h</td>
<td>&gt;100</td>
<td>mg/l</td>
<td>Daphnia magna</td>
<td>OECD 202 (Daphnia sp. Acute Immobilisation Test)</td>
<td></td>
</tr>
<tr>
<td>Toxicity to algae:</td>
<td>EC50</td>
<td>72h</td>
<td>16</td>
<td>mg/l</td>
<td>Pseudokirchneriella subcapitata</td>
<td>U.S. EPA-600/9-78-018</td>
<td></td>
</tr>
</tbody>
</table>

Persistence and degradability: Not readily biodegradable
Bioaccumulative potential: No
Mobility in soil: Negative
Results of PBT and vPvB assessment: No PBT substance, No vPvB substance

<table>
<thead>
<tr>
<th>Toxicity to bacteria:</th>
<th>&gt;5000</th>
<th>mg/l</th>
<th>Escherichia coli</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity to bacteria:</td>
<td>&gt;5000</td>
<td>mg/l</td>
<td>Pseudomonas fluorescens</td>
</tr>
<tr>
<td>Toxicity to bacteria:</td>
<td>LC0</td>
<td>24h</td>
<td>&gt;1000 0</td>
</tr>
<tr>
<td>Toxicity to annelids:</td>
<td>NOEC/NO EL</td>
<td>&gt;1000</td>
<td>mg/kg</td>
</tr>
</tbody>
</table>

Water solubility: Insoluble 20°C
Water solubility: Insoluble

SECTION 13: Disposal considerations

13.1 Waste treatment methods
For the substance / mixture / residual amounts
EC disposal code no.: 07 01 04 other organic solvents, washing liquids and mother liquors
18 01 06 chemicals consisting of or containing hazardous substances
Recommendation: Sewage disposal shall be discouraged.
Pay attention to local and national official regulations.
E.g. suitable incineration plant.
For contaminated packing material
Pay attention to local and national official regulations.
Empty container completely. Uncontaminated packaging can be recycled. Dispose of packaging that cannot be cleaned in the same manner as the substance. Do not perforate, cut up or weld uncleaned container. Residues may present a risk of explosion.

### SECTION 14: Transport information

**General statements**

| UN number: | 1170 |
| Transport by road/by rail (ADR/RID) |  |
| UN proper shipping name: | ETHANOL SOLUTION |
| Transport hazard class(es): | 3 |
| Packing group: | II |
| Classification code: | F1 |
| LQ (ADR 2015): | 1 L |
| Environmental hazards: | Not applicable |
| Tunnel restriction code: | D/E |

**Transport by sea (IMDG-code)**

| UN proper shipping name: | ETHANOL SOLUTION |
| Transport hazard class(es): | 3 |
| Packing group: | II |
| EmS: | F-E, S-D |
| Marine Pollutant: | n.a |
| Environmental hazards: | Not applicable |

**Transport by air (IATA)**

| UN proper shipping name: | Ethanol solution |
| Transport hazard class(es): | 3 |
| Packing group: | II |
| Environmental hazards: | Not applicable |

**Special precautions for user**

Persons employed in transporting dangerous goods must be trained. All persons involved in transporting must observe safety regulations. Precautions must be taken to prevent damage.

**Transport in bulk according to Annex II of MARPOL and the IBC Code**

Freighted as packaged goods rather than in bulk, therefore not applicable. Minimum amount regulations have not been taken into account. Danger code and packing code on request. Comply with special provisions.

### SECTION 15: Regulatory information

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

For classification and labelling see Section 2. Observe restrictions: Comply with trade association/occupational health regulations. Observe youth employment law (German regulation). Directive 2010/75/EU (VOC): 82.5 %

#### 15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

### SECTION 16: Other information

Revised sections: 1 - 16

These details refer to the product as it is delivered. Employee instruction/training in handling hazardous materials is required. Employee training in handling dangerous goods is required.
Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

<table>
<thead>
<tr>
<th>Classification in accordance with regulation (EC) No. 1272/2008 (CLP)</th>
<th>Evaluation method used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flam. Liq. 2, H225</td>
<td>Classification according to calculation procedure.</td>
</tr>
<tr>
<td>Eye Irrit. 2, H319</td>
<td>Classification according to calculation procedure.</td>
</tr>
</tbody>
</table>

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).

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

Flam. Liq. — Flammable liquid
Eye Irrit. — Eye irritation

Any abbreviations and acronyms used in this document:

AC Article Categories
acc., acc. to according, according to
ACGIHAmerican Conference of Governmental Industrial Hygienists
ADRAccord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)
AOELAcceptable Operator Exposure Level
AOXAdsorbable organic halogen compounds
approx. approximately
Art., Art. no. Article number
ATEAcute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP)
BAMBundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)
BauA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)
BCFBioconcentration factor
BGVBerufsgenossenschaftliche Vorschrift (= Accident Prevention Regulation)
BHTButylhydroxytoluol (= 2,6-Di-t-butyl-4-methyl-phenol)
BMVBiological monitoring guidance value (EH40, UK)
BODBiochemical oxygen demand
BSEBFromium Science and Environmental Forum
bwbody weight
CASChemical Abstracts Service
CECCoordinating European Council for the Development of Performance Tests for Fuels, Lubricants and Other Fluids
CESIOComité Européen des Agents de Surface et de leurs Intermédiaires Organiques
CIPACCollaborative International Pesticides Analytical Council
CLPClassification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)
CMRCarcinogenic, mutagenic, reproductive toxic
CODChemical oxygen demand
CTFACosmetic, Toiletry, and Fragrance Association
DMELDerived Minimum Effect Level
DNELDerived No Effect Level
DOC Dissolved organic carbon
DT50Dwell Time - 50% reduction of start concentration
DVSDeutscher Verband für Schweissen und verwandte Verfahren e.V. (= German Association for Welding and Allied Processes)
dw dry weight
e.g. for example (abbreviation of Latin 'exempli gratia'), for instance
ECEuropean Community
ECHA European Chemicals Agency
EEAEuropean Economic Area
EECEuropean Economic Community
EINECS European Inventory of Existing Commercial Chemical Substances
ELINCES European List of Notified Chemical Substances
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revision date / version: 24.08.2015 / 0002
Replacing version dated / version: 21.10.2009 / 0001
Valid from: 24.08.2015
PDF print date: 25.09.2015
Sure White
< 500 ml

SVHC Substances of Very High Concern
Tel. Telephone
ThOD Theoretical oxygen demand
TOC Total organic carbon
TRGS Technische Regeln für Gefahrstoffe (=Technical Regulations for Hazardous Substances)
UN RTDG United Nations Recommendations on the Transport of Dangerous Goods
VbF Verordnung über brennbare Flüssigkeiten (= Regulation for flammable liquids (Austria))
VOC Volatile organic compounds
vPvB very persistent and very bioaccumulative
WHO World Health Organization
wwt wet weight

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.
No responsibility.

These statements were made by:
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