Orbio MultiSurface Concentrate
Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Date of issue: 12-6-2014
Revision date: 1-4-2016
Supersedes: 11-3-2016
Version: 2.1

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

1.1. Product identifier
Product form: Mixture
Name: Orbio MultiSurface Concentrate
Type of product: Detergent

1.2. Relevant identified uses of the substance or mixture and uses advised against
1.2.1. Relevant identified uses
Main use category: Industrial use, Professional use
Use of the substance/mixture: Agent of cleaning

1.2.2. Uses advised against
No additional information available

1.3. Details of the supplier of the safety data sheet
Tennant Europe NV / Att.: Shared Service Center EMEA
Roderveldiaan 3
2600 Antwerpen - Belgium
T +32 321 794 11
www.orbio.com / info@tennantco.com

1.4. Emergency telephone number
<table>
<thead>
<tr>
<th>Country</th>
<th>Organisation/Company</th>
<th>Emergency number</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNITED KINGDOM</td>
<td>CHEMTREC UK</td>
<td>+44 (0) 870 8200418 (24 hrs.)</td>
</tr>
</tbody>
</table>

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Classification according to Regulation (EC) No. 1272/2008 [CLP]
Not classified

Adverse physicochemical, human health and environmental effects
No additional information available

2.2. Label elements
Labelling according to Regulation (EC) No. 1272/2008 [CLP]
No labelling applicable

2.3. Other hazards
Other hazards not contributing to the classification: None under normal conditions.
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substance
Not applicable

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>(CAS No) 7732-18-5</td>
<td>90 - 100</td>
<td>Not classified</td>
</tr>
</tbody>
</table>
Orbio MultiSurface Concentrate
Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

sodium hydroxide, caustic soda

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>Specific concentration limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium hydroxide, caustic soda</td>
<td>(CAS No): 1310-73-2 (EC no) 215-185-5 (EC index no) 011-002-00-6 (REACH-no) 01-2119457892-27</td>
<td>0,2 Not classified</td>
</tr>
</tbody>
</table>

Specific concentration limits:

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>Specific concentration limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium hydroxide, caustic soda</td>
<td>(CAS No): 1310-73-2 (EC no) 215-185-5 (EC index no) 011-002-00-6 (REACH-no) 01-2119457892-27</td>
<td>(0,5 =&lt;C &lt; 2) Eye Irrit. 2, H319 (0,5 =&lt;C &lt; 2) Skin Irrit. 2, H315 (2 =&lt;C &lt; 5) Skin Corr. 1B, H314 (C &gt;= 5) Skin Corr. 1A; H314</td>
</tr>
</tbody>
</table>

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Assure fresh air breathing. Allow the victim to rest.

First-aid measures after skin contact : Take off contaminated clothes, wash skin with plenty of water or have a shower (during minimum 15 minutes) and if necessary take medical advice.

First-aid measures after eye contact : Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persist.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/injuries after skin contact : May cause moderate irritation.

Symptoms/injuries after eye contact : May cause eye irritation.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media


Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Non combustible.

Explosion hazard : No direct explosion hazard.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

Concerning personal protective equipment to use, see item 8. Concerning disposal elimination after cleaning, see item 13.
**SECTION 7: Handling and storage**

7.1. Precautions for safe handling

Precautions for safe handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Keep only in the original container in a cool well ventilated place. Keep away from heat and direct sunlight. Keep container closed when not in use.


7.3. Specific end use(s)

Cleaning product.

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

8.1. Control parameters

<table>
<thead>
<tr>
<th>sodium hydroxide, caustic soda (1310-73-2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
</tr>
<tr>
<td>Local name</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Personal protective equipment: Avoid all unnecessary exposure.

Hand protection: In case of repeated or prolonged contact wear gloves

Eye protection: None under normal use

Skin and body protection: No special clothing/skin protection equipment is recommended under normal conditions of use

Respiratory protection: No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation. Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. half-mask with filter according to EN 149

Other information: Do not eat, drink or smoke during use.

**SECTION 9: Physical and chemical properties**

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>clear.</td>
</tr>
<tr>
<td>Colour</td>
<td>Colourless.</td>
</tr>
<tr>
<td>Odour</td>
<td>Odourless.</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>12.2 - 12.49</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>0 °C</td>
</tr>
<tr>
<td>Boiling point</td>
<td>100 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in water.</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>1 mPa.s</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other information

No additional information available
SECTION 10: Stability and reactivity

10.1. Reactivity
Stable under normal conditions of use.

10.2. Chemical stability
Stable at ambient temperature and under normal conditions of use.

10.3. Possibility of hazardous reactions
Will not occur.

10.4. Conditions to avoid
Freezing. High temperature.

10.5. Incompatible materials
None known.

10.6. Hazardous decomposition products
Carbon oxides (CO, CO2), fume.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

**Acute toxicity**: Not classified

**Skin corrosion/irritation**: May cause skin irritation
  
  **pH**: 12.2 - 12.49

**Serious eye damage/irritation**: May cause eye irritation
  
  **pH**: 12.2 - 12.49

**Respiratory or skin sensitisation**: Not classified

**Additional information**: Based on available data, the classification criteria are not met

**Germ cell mutagenicity**: Not classified
  
  Based on available data, the classification criteria are not met

**Carcinogenicity**: Not classified
  
  Based on available data, the classification criteria are not met

**Reproductive toxicity**: Not classified

**Additional information**: Based on available data, the classification criteria are not met

**Specific target organ toxicity (single exposure)**: Not classified

**Additional information**: Based on available data, the classification criteria are not met

**Specific target organ toxicity (repeated exposure)**: Not classified

**Additional information**: Based on available data, the classification criteria are not met

**Aspiration hazard**: Not classified

**Additional information**: Based on available data, the classification criteria are not met

SECTION 12: Ecological information

12.1. Toxicity

**sodium hydroxide, caustic soda (1310-73-2)**

<table>
<thead>
<tr>
<th>Species</th>
<th>LC50/EC50 Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fishes (96 h)</td>
<td>&gt; 35 mg/l</td>
</tr>
<tr>
<td>Other aquatic organisms (96 h)</td>
<td>&gt; 33 mg/l</td>
</tr>
<tr>
<td>Waterflea (48 h)</td>
<td></td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

**Orbio MultiSurface Concentrate**

Persistence and degradability: Not established.

12.3. Bioaccumulative potential

**Orbio MultiSurface Concentrate**

Bioaccumulative potential: Not established.

12.4. Mobility in soil

No additional information available
### 12.5. Results of PBT and vPvB assessment

**Orbio MultiSurface Concentrate**

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

### 12.6. Other adverse effects

Additional information: Avoid release to the environment

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

- **Waste disposal recommendations**: Dispose in a safe manner in accordance with local/national regulations.
- **Ecology - waste materials**: Avoid release to the environment.

### SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

#### 14.1. UN number

- **UN-No. (ADR)**: Not applicable
- **UN-No. (IATA)**: Not applicable

#### 14.2. UN proper shipping name

- **Proper Shipping Name (ADR)**: Not applicable
- **Proper Shipping Name (IATA)**: Not applicable

#### 14.3. Transport hazard class(es)

- **ADR**
  - Transport hazard class(es) (ADR): Not applicable

- **IATA**
  - Transport hazard class(es) (IATA): Not applicable

#### 14.4. Packing group

- **Packing group (ADR)**: Not applicable
- **Packing group (IATA)**: Not applicable

#### 14.5. Environmental hazards

- **Dangerous for the environment**: No
- **Other information**: No supplementary information available

#### 14.6. Special precautions for user

- **Overland transport**: No data available
- **Air transport**: No data available

#### 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable

### SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Detergent Regulation: Ingredient data sheet:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>75 - 100%</td>
</tr>
<tr>
<td>SODIUM HYDROXIDE</td>
<td>1310-73-2</td>
<td>0.1 - 1%</td>
</tr>
</tbody>
</table>
### 15.1.2 National regulations

No additional information available

### 15.2 Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

**Indication of changes:**

Revised SDS according to Commission Regulation (EU) No 2015/830.

<table>
<thead>
<tr>
<th>2.2</th>
<th>Extra phrases</th>
<th>Added</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Composition/information on ingredients</td>
<td>Modified</td>
</tr>
<tr>
<td>3.2</td>
<td>Product form</td>
<td>Modified</td>
</tr>
<tr>
<td>8.2</td>
<td>Additional information</td>
<td>Added</td>
</tr>
<tr>
<td>10</td>
<td>Additional information</td>
<td>Added</td>
</tr>
</tbody>
</table>

**Abbreviations and acronyms:**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLP</td>
<td>Classification Labelling Packaging Regulation: Regulation (EC) No 1272/2008</td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent Bioaccumulative Toxic</td>
</tr>
<tr>
<td>vPvB</td>
<td>Very Persistent and Very Bioaccumulative</td>
</tr>
<tr>
<td>ADR</td>
<td>European Agreement concerning the International Carriage of Dangerous Goods by Road</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
</tr>
<tr>
<td>IMDG</td>
<td>International Maritime Dangerous Goods</td>
</tr>
<tr>
<td>RID</td>
<td>Regulations concerning the International Carriage of Dangerous Goods by Rail</td>
</tr>
<tr>
<td>LC50</td>
<td>Median lethal concentration</td>
</tr>
<tr>
<td>LD50</td>
<td>Median lethal dose</td>
</tr>
<tr>
<td>SDS</td>
<td>Safety Data Sheet</td>
</tr>
<tr>
<td>CAS</td>
<td>CAS (Chemical Abstracts Service) number</td>
</tr>
<tr>
<td>EG-nr.:</td>
<td>EINECS- en ELINCS-number</td>
</tr>
<tr>
<td>EINECS</td>
<td>European Inventory of Existing Commercial Substances</td>
</tr>
</tbody>
</table>

**Data sources:**


**Other information:**

: REACH Disclaimer:

This information is based on current knowledge. Consistency of data in the SDS with CSR is considered, as far as the information is available at the time of compilation (cfr Revision date and Version number). DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

**Full text of H- and EUH-statements:**

<table>
<thead>
<tr>
<th>H-</th>
<th>EUH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Corr. 1A</td>
<td>Skin corrosion/irritation, Category 1A</td>
</tr>
<tr>
<td>H314</td>
<td>Causes severe skin burns and eye damage</td>
</tr>
</tbody>
</table>

**Safety Data Sheet applicable for regions:**

: CHEM_UK - United Kingdom; GB - United Kingdom; GR - Greece; IE - Ireland; MT - Malta

This Safety Data Sheet is compiled by:

Trade Wind B.V.  [info@twnl.com](mailto:info@twnl.com)

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.