SAFETY DATA SHEET
According regulation (EC) No. 1907/2006

Page: 1
Compilation date: 18.02.2011
Revision date: 08.10.2015
Revision No: 6.1

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

1.1. Product identifier

Product name: Cleaner Tab for RATIONAL SelfCookingCenter®, Art.-No. 56.00.206, 56.00.210, 56.00.220

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

Use of substance / mixture: Cleaner for professional users

1.3. Details of the supplier of the safety data sheet

Company name: Rational AG
Iglinger Strasse 62
D - 86899 Landsberg
Germany
Tel: +49 (0)8191 - 3270
Fax: +49 (0)8191 - 21735
Email: reinigung@rational-online.de

1.4. Emergency telephone number

Emergency tel: +49 (0)89 - 19240 (24 hours Giftnotruf München)
NPIS: 0870 600 62666
National poison information service (UK)

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: Skin Corr. 1A: H314
Most important adverse effects: Causes severe skin burns and eye damage.

2.2. Label elements

Label elements under CLP:

Hazard statements: H314: Causes severe skin burns and eye damage.
Signal words: Danger
Hazard pictograms: GHS05: Corrosion

Hazard components for labelling: sodium hydroxide, disodium metasilicate, fatty alcohol ethoxylate

Precautionary statements:
P102: Keep out of reach of children.
P101: If medical advice is needed, have product container or label at hand.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P303+361+353: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water.

[cont...]
SAFETY DATA SHEET
Cleaner Tab for RATIONAL SelfCookingCenter®

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P301+330+331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P310: Immediately call a POISON CENTER or doctor.
P501: Dispose of contents to problem waste.

2.3. Other hazards

PBT: This substance is not identified as a PBT substance.

Section 3: Composition/information on ingredients

*3.2. Mixtures

Hazardous ingredients:

SODIUM HYDROXIDE - REACH registered number(s): 01-2119457892-27-0000

<table>
<thead>
<tr>
<th>EINECS</th>
<th>CAS</th>
<th>CLP Classification</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>215-185-5</td>
<td>1310-73-2</td>
<td>Skin Corr. 1A: H314</td>
<td>&gt;20%</td>
</tr>
</tbody>
</table>

DISODIUM METASILICATE - REACH registered number(s): 01-2119498111-37-0000

<table>
<thead>
<tr>
<th>EINECS</th>
<th>CAS</th>
<th>CLP Classification</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>229-912-9</td>
<td>6834-92-0</td>
<td>Skin Corr. 1B: H314; STOT SE 3: H335</td>
<td>10-&lt;20%</td>
</tr>
</tbody>
</table>

SODIUM CARBONATE - REACH registered number(s): 01-2119485498-19-0000

<table>
<thead>
<tr>
<th>EINECS</th>
<th>CAS</th>
<th>CLP Classification</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>207-838-8</td>
<td>497-19-8</td>
<td>Eye Irrit. 2: H319</td>
<td>10-20%</td>
</tr>
</tbody>
</table>

FATTY ALCOHOL ALKOXYLATE - REACH registered number(s): 02-2119548491-37-0000

<table>
<thead>
<tr>
<th>EINECS</th>
<th>CAS</th>
<th>CLP Classification</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>111190-40-0</td>
<td>Eye Dam. 1: H318; Aquatic Acute 1: H400; Aquatic Chronic 2: H411</td>
<td>1-&lt;2.5%</td>
</tr>
</tbody>
</table>

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning.

Eye contact: Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.

Ingestion: Wash out mouth with water. If conscious, give half a litre of water to drink immediately. Do not induce vomiting. Consult a doctor.

Inhalation: Move to fresh air in case of accidental inhalation of vapours.

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

Skin contact: Irritation or pain may occur at the site of contact. Severe burns may occur.

Eye contact: Corneal burns may occur. May cause permanent damage.

Ingestion: Corrosive burns may appear around the lips. Nausea and stomach pain may occur.

Inhalation: Not applicable.

Delayed / immediate effects: Immediate effects can be expected after long-term exposure.

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

Immediate / special treatment: Eye bathing equipment should be available on the premises.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: Corrosive.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Do not attempt to take action without suitable protective clothing - see section 8 of SDS.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Wash the spillage site with large amounts of water. Refer to section 13 of SDS for suitable method of disposal.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in cool, well ventilated area. Keep container tightly closed. Storage class: 8B (Non-combustible corrosive substances)

Suitable packaging: Must only be kept in original packaging.

7.3. Specific end use(s)

Specific end use(s): No data available.

Section 8: Exposure controls/personal protection

8.1. Control parameters
SAFETY DATA SHEET
Cleaner Tab for RATIONAL SelfCookingCenter®

Hazardous ingredients:
SODIUM HYDROXIDE

Workplace exposure limits:

<table>
<thead>
<tr>
<th>State</th>
<th>8 hour TWA</th>
<th>15 min. STEL</th>
<th>8 hour TWA</th>
<th>15 min. STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>-</td>
<td>2 mg/m³</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.
Respiratory protection: Respiratory protection not required.
Hand protection: Gloves (alkali-resistant). Breakthrough time of the glove material < 1 hour.
Suitable material: NR (natural rubber), CR (polychloroprene) or NBR (nitrile rubber).
Eye protection: Tightly fitting safety goggles. Ensure eye bath is to hand.
Skin protection: Not applicable.
Environmental: No special requirement.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>Solid</td>
</tr>
<tr>
<td>Colour</td>
<td>White</td>
</tr>
<tr>
<td>Odour</td>
<td>Characteristic odour</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Oxidising</td>
<td>Non-oxidising (by EC criteria)</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Soluble</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Boiling point/range°C</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Melting point/range°C</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability limits: lower</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point°C</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Part.coeff. n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Autoflammability°C</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>Not applicable</td>
</tr>
<tr>
<td>pH</td>
<td>12.7 (1%ig)</td>
</tr>
<tr>
<td>Relative density</td>
<td>1100 g/l</td>
</tr>
<tr>
<td>VOC g/l</td>
<td>&lt;3%</td>
</tr>
</tbody>
</table>

9.2. Other information

Other information: No data available.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

[cont...]
10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Humidity.

10.5. Incompatible materials

Materials to avoid: Acids. Metals.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes. Contact with acids liberates toxic gas.

Section 11: Toxicological information

11.1. Information on toxicological effects

Hazardous ingredients:

SODIUM HYDROXIDE

<table>
<thead>
<tr>
<th></th>
<th>MUS</th>
<th>LD50</th>
<th>mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPR</td>
<td></td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>ORL</td>
<td>RBT</td>
<td>500</td>
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</table>

DISODIUM METASILICATE

<table>
<thead>
<tr>
<th></th>
<th>MUS</th>
<th>LD50</th>
<th>mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORL</td>
<td></td>
<td>770</td>
<td></td>
</tr>
<tr>
<td>ORL</td>
<td>RAT</td>
<td>1153</td>
<td></td>
</tr>
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</table>

SODIUM CARBONATE

<table>
<thead>
<tr>
<th></th>
<th>MUS</th>
<th>LD50</th>
<th>mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORL</td>
<td></td>
<td>6600</td>
<td></td>
</tr>
<tr>
<td>ORL</td>
<td>RAT</td>
<td>4090</td>
<td></td>
</tr>
<tr>
<td>SCU</td>
<td>MUS</td>
<td>2210</td>
<td></td>
</tr>
</tbody>
</table>

FATTY ALCOHOL ALKOXYLATE

<table>
<thead>
<tr>
<th></th>
<th>RAT</th>
<th>LD50</th>
<th>mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORAL</td>
<td></td>
<td>3180</td>
<td></td>
</tr>
</tbody>
</table>

Toxicity values: No data available.

Symptoms / routes of exposure

Skin contact: Irritation or pain may occur at the site of contact. Severe burns may occur.
Eye contact: Corneal burns may occur. May cause permanent damage.
Ingestion: Corrosive burns may appear around the lips. Nausea and stomach pain may occur.
Inhalation: Not applicable.

Delayed / immediate effects: Immediate effects can be expected after long-term exposure.
Section 12: Ecological information

12.1. Toxicity

Hazardous ingredients:

**SODIUM HYDROXIDE**

<table>
<thead>
<tr>
<th>Species</th>
<th>Endpoint</th>
<th>Concentration (mg/l)</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Daphnia magna</em></td>
<td>24H EC50</td>
<td>76</td>
</tr>
<tr>
<td><em>Gambusia affinis</em></td>
<td>96H LC50</td>
<td>125</td>
</tr>
</tbody>
</table>

**SODIUM CARBONATE**

<table>
<thead>
<tr>
<th>Species</th>
<th>Endpoint</th>
<th>Concentration (mg/l)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frischwasser Invertebraten</td>
<td>48H EC50</td>
<td>200-227</td>
</tr>
<tr>
<td><em>Lepomis macrochirus</em></td>
<td>96H LC50</td>
<td>300</td>
</tr>
</tbody>
</table>

**FATTY ALCOHOL ALKOXYLATE**

<table>
<thead>
<tr>
<th>Species</th>
<th>Endpoint</th>
<th>Concentration (mg/l)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquatische Invertebraten</td>
<td>48H EC50</td>
<td>0.1-1</td>
</tr>
<tr>
<td><em>Leuciscus idus</em></td>
<td>96H LC50</td>
<td>0.1-1</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

Persistence and degradability: Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

12.4. Mobility in soil

Mobility: Soluble in water.

12.5. Results of PBT and vPvB assessment

PBT identification: This substance is not identified as a PBT substance.

12.6. Other adverse effects

Other adverse effects: No data available.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.

Waste code number: 20 01 29

Disposal of packaging: May be reused following decontamination.

NB: The user’s attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

14.1. UN number

UN number: UN3262
14.2. UN proper shipping name

Shipping name: CORROSIVE SOLID, BASIC, INORGANIC, N.O.S.
(SODIUM HYDROXIDE; DISODIUM METASILICATE; Limited Quantity: 1kg)

14.3. Transport hazard class(es)

Transport class: 8

14.4. Packing group

Packing group: II

14.5. Environmental hazards

Environmentally hazardous: No
Marine pollutant: No

14.6. Special precautions for user

Special precautions: No special precautions.
Tunnel code: E
Transport category: 2

Section 15: Regulatory information

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

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No. 1907/2006.
* indicates text in the SDS which has changed since the last revision.
Data references: Safety data sheets from our raw material suppliers

Classification for mixtures and used evaluation method according to Article 9 of regulation (EC) 1272/2008 [CLP]:

Calculation method

Phrases used in s.2 and 3:
H314: Causes severe skin burns and eye damage.
H318: Causes serious eye damage.
H319: Causes serious eye irritation.
H335: May cause respiratory irritation.
H400: Very toxic to aquatic life.
H411: Toxic to aquatic life with long lasting effects.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.