Safety Data Sheet

in accordance with 29 CFR 1910.1200(g)

Cleaning-Tab for RATIONAL SelfCooking Center®, Art. Nr. 56.00.206A, 56.00.210A, 56.00.220A

1. Identification

Product identifier

Cleaning-Tab for RATIONAL SelfCooking Center®, Art.-no. 56.00.206A, 56.00.210A, 56.00.220A

Details of the supplier of the safety data sheet

Company name: Rational AG
Street: Iglinger Strasse 62
Place: D-86899 Landsberg
Telephone: +49 (0)8191-3270
Telefax: +49 (0)8191-21735

Responsible Department: Reinigung@rational-online.com

Emergency phone number:
In North America contact Info Trac at 1-800-535-5053
outside USA/CA contact +49 89 19240

2. Hazard(s) identification

Classification of the chemical

Hazard categories:
- Substance or mixture corrosive to metals: Met. Corr. 1
- Skin corrosion/irritation: Skin Corr. 1A
- Serious eye damage/eye irritation: Eye Dam. 1

Hazard Statements:
- May be corrosive to metals.
- Causes severe skin burns and eye damage.

Label elements

Signal word: Danger
Pictograms: corrosion

Hazard statements

May be corrosive to metals.
Causes severe skin burns and eye damage.

Precautionary statements

Wear protective gloves/protective clothing/eye protection/face protection.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
Immediately call a poison center/doctor.

Hazards not otherwise classified

No data available.

3. Composition/information on ingredients

Mixtures

Chemical characterization

Mixture containing substances listed in section 3 with additives
Hazardous components

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Components</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1310-73-2</td>
<td>caustic soda, sodium hydroxide</td>
<td>30 - &lt;60 %</td>
</tr>
<tr>
<td>6834-92-0</td>
<td>Disodium metasilicate</td>
<td>10 - &lt;20 %</td>
</tr>
<tr>
<td>497-19-8</td>
<td>Sodium carbonate</td>
<td>10 - 20 %</td>
</tr>
<tr>
<td>68154-99-4</td>
<td>Fatty alcohol alcoxylate</td>
<td>1 - 5 %</td>
</tr>
</tbody>
</table>

4. First-aid measures

Description of first aid measures

General information
If you feel unwell, seek medical advice.

After inhalation
Move to fresh air in case of accidental inhalation of dusts.
Wash mouth and nasal passages with water.

After contact with skin
In case of contact with skin wash off immediately with soap and water.
Remove contaminated soaked clothing immediately.
Consult a doctor if skin irritation persists.

After contact with eyes
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Consult (eye) doctor immediately.

After ingestion
Rinse out mouth and give plenty of water to drink.
Summon a doctor immediately.
Do not induce vomiting.

Most important symptoms and effects, both acute and delayed
DANGER!
Causes severe burns.

OSHA Hazard Communication: This material is considered hazardous by the OSHA Hazard Communication Standard 29CFR 1910.1200.

Indication of any immediate medical attention and special treatment needed
No data available.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media
Product does not burn, fire-extinguishing activities according to surrounding.

Unsuitable extinguishing media
None

Specific hazards arising from the chemical
Water forms corrosive alkaline solutions.

Special protective equipment and precautions for fire-fighters
Wear self-contained breathing apparatus and protective suit.

Additional information
Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.
6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Use personal protective clothing.
Keep people away and stay on the upwind side.
Avoid contact with skin, eyes and clothing.

Environmental precautions
Do not discharge into the drains/surface waters/groundwater.

Methods and material for containment and cleaning up
Pick up mechanically, avoiding dust, and provide disposal in suitable recipients.
Flush rests with sufficient amount of water.

Reference to other sections
Information for disposal look up chapter 13.

7. Handling and storage

Precautions for safe handling
Advice on safe handling
No special handling advice required.

Advice on protection against fire and explosion
No special protective measures against fire required.

Conditions for safe storage, including any incompatibilities
Requirements for storage rooms and vessels
Keep in closed original container.

Advice on storage compatibility
Keep away from food, drink and animal feeding stuffs.
Do not store with acids.
Protect from moisture.

8. Exposure controls/personal protection

Control parameters

Exposure limits

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Components</th>
<th>ppm</th>
<th>mg/m³</th>
<th>fib/cc</th>
<th>Category</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>1310-73-2</td>
<td>Sodium hydroxide</td>
<td>-</td>
<td>2</td>
<td></td>
<td>TWA (8 h)</td>
<td>PEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
<td></td>
<td>TWA (8 h)</td>
<td>TLV</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-</td>
<td></td>
<td></td>
<td>Peak</td>
<td>TLV</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-</td>
<td>C 2</td>
<td></td>
<td>Ceiling</td>
<td>REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-</td>
<td>C 2</td>
<td></td>
<td>Ceiling</td>
<td>TLV</td>
</tr>
</tbody>
</table>

Additional advice on limit values
Does not contain substances above concentration limits fixing an occupational exposure limit.

Exposure controls

Appropriate engineering controls
Provide appropriate exhaust ventilation at machinery and at places where dust can be generated.

Protective and hygiene measures
Avoid dust formation. Take off immediately all contaminated clothing.
Avoid contact with skin, eyes and clothing.
Wash hands before breaks and immediately after handling the product.
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Product code: 00625-0031_US_GHS

At work do not eat, drink, smoke or take drugs.

Eye/face protection
Eye wash bottle with pure water.
Tightly fitting goggles

Hand protection
Protective gloves
Suitable material: NR (natural rubber), CR (polychloroprene) or NBR (nitrile rubber), category III according to EN 374
The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.
Breakthrough time (maximal wear duration):
Wear duration with occasional contact, splashes (Level 2: < 30 min): Disposable-gloves, Thickness of the glove material 0,1 mm
Wear duration with permanent contact (Level 6: < 480 min): Protective gloves, Thickness of the glove material 0,7 mm.
Breakthrough times and swelling properties of the material must be taken into consideration.

Skin protection
Light protective clothing

Respiratory protection
No personal respiratory protective equipment normally required.
Breathing apparatus (particle filter) only if dust is formed.

9. Physical and chemical properties

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Physical state:</th>
<th>Tablet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color:</td>
<td>White</td>
</tr>
<tr>
<td>Odor:</td>
<td>Characteristic</td>
</tr>
</tbody>
</table>

Test method

pH-Value: approx. 12,7

Changes in the physical state

Initial boiling point and boiling range: n.a.
Flash point: n.a.
Lower explosion limits: n.a.
Upper explosion limits: n.a.
Ignition temperature: n.a.

Oxidizing properties

Non oxidizing.

Vapor pressure: n.a.
Density: 1100 g/cm³
Water solubility: Soluble (at 20 °C)
Partition coefficient: n.d.
Viscosity / dynamic: n.a.

Other information

No data available.

10. Stability and reactivity
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Reactivity
No data available.

Chemical stability
Stability: Stable
Stable under normal conditions.

Possibility of hazardous reactions
Hazardous reactions: May occur
Strong exothermic reaction with acids.
Reactions with light metals, with evolution of hydrogen.

Conditions to avoid
Protect from moisture.

Incompatible materials
Exothermic reaction with: Acids.

Hazardous decomposition products
Develops poisonous gases in contact with acids.

11. Toxicological information

Information on toxicological effects
Route(s) of Entry
Skin and eye contact, inhalation and ingestion.

Acute toxicity
Based on available data, the classification criteria are not met.
Classification relevant LD/LC 50 values:
LD50/oral/rat: 600 - 1350 mg/kg (Disodium metasilicate)
LD50/oral/rat: 2000 mg/kg (caustic soda, sodium hydroxide)
LD50/oral/rat: > 2000 mg/kg (Fatty alcohol alcoxylate)
LD50/oral/rat: > 4900 mg/kg (Sodium carbonate)

Irritation and corrosivity
Causes severe skin burns and eye damage.
Causes severe burns.
Irritates respiratory tract.
Danger of perforation of the gullet and of the stomach.

Sensitizing effects
Based on available data, the classification criteria are not met.

Specific target organ toxicity (STOT) - single exposure
Based on available data, the classification criteria are not met.

Severe effects after repeated or prolonged exposure
Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction
Based on available data, the classification criteria are not met.

Carcinogenicity (NTP):
Not listed
Carcinogenicity (IARC):
Not listed
Carcinogenicity (OSHA):
Not listed

Aspiration hazard
Based on available data, the classification criteria are not met.

12. Ecological information
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Ecotoxicity

Disodium metasilicate
LC50/Brachydanio rerio/96 h = 3185 mg/l
EC50/Daphnia magna/48 h = 4857 mg/l

Sodium carbonate
LC50/Lepomis macrochirus/96 h = 300 mg/l

Fatty alcohol alcoxylate
LC50/Leuciscus idus/96 h = 0.1 - 1 mg/l
EC50/Waterplants/72 h = 0.1 - 1 mg/l

Persistence and degradability

No data available.

Bioaccumulative potential

No data available.

Mobility in soil

No data available.

Other adverse effects

No data available.

13. Disposal considerations

Waste treatment methods

Advice on disposal
Remove in accordance with local official regulations.

Contaminated packaging
Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

14. Transport information

US DOT 49 CFR 172.101

UN/ID number: UN3262

Proper shipping name: CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (caustic soda, sodium hydroxide, Disodium metasilicate)

Transport hazard class(es): 8
Packing group: II
Hazard label: 8

Marine transport (IMDG)

UN number: UN3262

UN proper shipping name: CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (sodium hydroxide, disodium metasilicate)

Transport hazard class(es): 8
Packing group: II
Hazard label: 8

Limited quantity: 1 kg
EmS: F-A, S-B
## Cleaning-Tab for RATIONAL SelfCooking Center®

### Air transport (ICAO)

<table>
<thead>
<tr>
<th>UN number:</th>
<th>UN3262</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name:</td>
<td>CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (sodium hydroxide, disodium metasilikate)</td>
</tr>
<tr>
<td>Transport hazard class(es):</td>
<td>8</td>
</tr>
<tr>
<td>Packing group:</td>
<td>II</td>
</tr>
<tr>
<td>Hazard label:</td>
<td>8</td>
</tr>
</tbody>
</table>

Limited quantity Passenger: 5 kg

- IATA-packing instructions - Passenger: 814
- IATA-max. quantity - Passenger: 15 kg
- IATA-packing instructions - Cargo: 816
- IATA-max. quantity - Cargo: 50 kg

### Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

### Special precautions for user

Take the usual precautions when handling chemicals.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

The transport takes place only in approved and appropriate packaging.

### 15. Regulatory information

#### U.S. Regulations

**National Inventory TSCA**

All of the components are listed on the TSCA inventory.

**SARA**

To the best of our knowledge this product contains no toxic chemicals subject to the supplier notification requirements of Section 313 of the Superfund Amendments and Reauthorization Act (SARA/EPCRA) and the requirements of 40 CFR Part 372.

### 16. Other information

**Hazardous Materials Information Label (HMIS)**

- Health: 3
- Flammability: 0
- Physical Hazard: 1

**NFPA Hazard Ratings**

- Health: 3
- Flammability: 0
- Reactivity: 1
- Unique Hazard: 0

**Changes**

Revision date: 08.07.2014

Revision No: 1,1

Changes in chapter:

**Other data**

Data of sections 4 to 8, as well as 10 to 12, do not necessarily refer to the use and the regular handling.
of the product (in this sense consult Prescribing Information and expert information), but to release of
major amounts in case of accidents and irregularities.
The information describes exclusively the safety requirements for the product(s) and is based on the
present level of our knowledge.
The delivery specifications are contained in the corresponding product sheet.
This data does not constitute a guarantee for the characteristics of the product(s) as defined by the
legal warranty regulations.
(n.a. = not applicable; n.d. = not determined)

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety
data sheet.)