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

Product identifier
Care-Tab for RATIONAL SelfCookingCenter®, Art. Nr. 56.00.560, 56.00.562

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

Use of the substance/mixture
Preservative agent

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: Responsible for the safety data sheet: reinigung@rational-online.de

Emergency telephone: In North America contact Info Trac at 1-800-535-5053 outside USA/CA: ++49 (0)89-19240

SECTION 2: Hazards identification

Classification of the substance or mixture

Regulation (EC) No. 1272/2008
Hazard categories:
Skin corrosion/irritation: Skin Irrit. 2
Serious eye damage/eye irritation: Eye Irrit. 2

Hazard Statements:
Causes skin irritation.
Causes serious eye irritation.

Label elements
Regulation (EC) No. 1272/2008
Signal word: Warning

Pictograms:

Hazard statements
Causes skin irritation.
Causes serious eye irritation.

Precautionary statements
Keep out of reach of children.
If medical advice is needed, have product container or label at hand.
Wear protective gloves/protective clothing/eye protection/face protection.
IF ON SKIN: Wash with plenty of water.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF exposed or concerned: Get medical advice/attention.

Other hazards
Not known.

SECTION 3: Composition/information on ingredients

Mixtures
Hazardous components

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>77-92-9</td>
<td>Citric acid</td>
<td>&gt; 20 %</td>
</tr>
<tr>
<td>617-48-1</td>
<td>Malic acid</td>
<td>&gt; 20 %</td>
</tr>
<tr>
<td>124-04-9</td>
<td>Adipic acid</td>
<td>1 - 5 %</td>
</tr>
</tbody>
</table>

SECTION 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 dust or fumes from overheating or combustion.

After contact with skin
In case of contact with skin wash off immediately with soap and water. 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. Seek medical treatment by eye specialist.

After ingestion
Rinse out mouth thoroughly with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Summon a doctor immediately.

Indication of any immediate medical attention and special treatment needed
Treat symptoms.

SECTION 5: Firefighting measures

Extinguishing media

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

Unsuitable extinguishing media
Full water jet.

Special hazards arising from the substance or mixture
Fire may produce: Irritant/corrosive, flammable as well as toxic distillation gases (carbonization gases).

Advice for firefighters
Use breathing apparatus with independent air supply. Protective suit.

Additional information
Cool containers at risk with water spray jet. Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures
No special precautions required.

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 away residues with water.

Reference to other sections
Observe protective instructions (see Sections 7 and 8).
Information for disposal look up chapter 13.

SECTION 7: Handling and storage

Precautions for safe handling

Advice on safe handling
Avoid the formation of dust.
Avoid contact with eyes, skin or mucous membrane.

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 the original sealed container.
Keep containers tightly closed in a dry, well-ventilated place.

Further information on storage conditions
Keep away from food, drink and animal feeding stuffs.

SECTION 8: Exposure controls/personal protection

Control parameters

Exposure controls

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

Protective and hygiene measures
Avoid contact with eyes and skin.
Wash hands before breaks and at the end of workday.
When using do not eat, drink or smoke.
Remove and wash contaminated clothing before re-use.

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

Hand protection
Protective gloves resistant to chemicals made off natural-rubber latex, Minimum coat thickness 0.6 mm,
Permeation resistance (wear duration) approx. 480 minutes, i.e. protective glove <Lapren 706> made by
www.kcl.de.
This recommendation refers exclusively to the chemical compatibility and the lab test conforming to EN 374
carried out under lab conditions.
Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the
recommendations given by the manufacturer of protective gloves.

Respiratory protection
No personal respiratory protective equipment normally required.
Breathing apparatus (particle filter) only if dust is formed.
SECTION 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>Colour:</td>
<td>White</td>
</tr>
<tr>
<td>Odour:</td>
<td>Characteristic</td>
</tr>
</tbody>
</table>

**Test method**

**pH-Value:** 2.5 (1%)

**Changes in the physical state**

<table>
<thead>
<tr>
<th>Flash point:</th>
<th>n.a.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower explosion limits:</td>
<td>n.a.</td>
</tr>
<tr>
<td>Upper explosion limits:</td>
<td>n.a.</td>
</tr>
<tr>
<td>Ignition temperature:</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

**Oxidizing properties**

<table>
<thead>
<tr>
<th>Vapour pressure:</th>
<th>n.a.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(at 20 °C)</td>
<td></td>
</tr>
<tr>
<td>Water solubility:</td>
<td>Soluble</td>
</tr>
<tr>
<td>(at 20 °C)</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient:</td>
<td>n. d.</td>
</tr>
</tbody>
</table>

**Other information**

- Bulk density: approx. 800 g/L

SECTION 10: Stability and reactivity

**Conditions to avoid**

- Protect from moisture.

**Incompatible materials**

- No materials to be especially mentioned.

**Hazardous decomposition products**

- No hazardous decomposition products known.

SECTION 11: Toxicological information

**Information on toxicological effects**

**Acute toxicity**

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

  | Citric acid | LD50/oral/rat: 6730 mg/kg |
  | Adipic acid | LD50/oral/rat: 11000 mg/kg |
  | Malic acid | LD50/oral/rat: >3200 mg/kg |
Safety Data Sheet

Care-Tab for RATIONAL SelfCookingCenter®, Art. Nr. 56.00.560, 56.00.562

Print date: 03.02.2016  Product code: 00625-0016_US_GHS

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Exposure routes</th>
<th>Method</th>
<th>Dose</th>
<th>Species</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>77-92-9</td>
<td>Citric acid</td>
<td>oral</td>
<td>LD50</td>
<td>11700 mg/kg</td>
<td>Rat</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>&gt; 2000 mg/kg</td>
<td>Rat</td>
<td></td>
</tr>
</tbody>
</table>

Irritation and corrosivity
Causes skin irritation.
Causes serious eye irritation.
Skin irritation: Irritant
Eye irritation: Irritant

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

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.
STOT - Single exposure: Not classified.
STOT - Repeated exposure: Not classified.
Aspiration hazard: Not classified.

Carcinogenic/mutagenic/toxic effects for reproduction
Based on available data, the classification criteria are not met.
Carcinogenicity: Not classified.
Mutagenicity: Not classified.
Teratogenicity: Not classified.

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

Practical experience

Other observations
Ingestion causes irritation of upper respiratory system and gastrointestinal disturbance.
Inhalation of dust may cause shortness of breath, tightness of the chest, a sore throat and cough.

SECTION 12: Ecological information

Toxicity
Citric acid:
LC50/Leuciscus idus/96 h: 440 - 706 mg/l
EC50/Daphnia magna: 85 mg/l
Adipic acid:
LC50/Pimephales promelas/96 h: 97 mg/l

Persistence and degradability
Product is biodegradable.

Bioaccumulative potential
No data available.

Mobility in soil
The product is soluble in water.

Other adverse effects
No data available.
SECTION 13: Disposal considerations

Waste treatment methods

Advice on disposal
Remove in accordance with local official regulations.

Contaminated packaging
Empty containers should be taken for local recycling, recovery or waste disposal.
Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.
Packaging that cannot be cleaned should be disposed of like the product.

SECTION 14: Transport information

Canadian TDG

Proper shipping name: Not regulated.

Other applicable information
Non hazardous material as defined by the transport regulations.

SECTION 15: Regulatory information

Canadian regulations
This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

DSL/NDSL inventory status
All of the components are listed on the DSL Inventory.

WHMIS classification
WHMIS: D2B

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all information required by the CPR.

SECTION 16: Other information

Changes
-

Further Information
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 package leaflet 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.)