Rational AG

Safety Data Sheet

in accordance with 29 CFR 1910.1200(g)

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


1. Identification

Product identifier

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

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: reinfung@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:
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

Signal word: Warning
Pictograms: exclamation mark

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.

Hazards not otherwise classified

Not known.

3. Composition/information on ingredients

Mixtures
Hazardous components

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Components</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>

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.

Most important symptoms and effects, both acute and delayed

WARNING!
Causes serious eye irritation.
Causes skin irritation.

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
Treat symptoms.

5. Fire-fighting measures

Extinguishing media

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

Unsuitable extinguishing media
Full water jet.

Specific hazards arising from the chemical
Fire may produce:
Irritant/corrosive, flammable as well as toxic distillation gases (carbonization gases).

Special protective equipment and precautions for fire-fighters
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
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 rests with sufficient amount of water.

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

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.

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 of 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.
9. Physical and chemical properties

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>Tablet</td>
</tr>
<tr>
<td>Color</td>
<td>White</td>
</tr>
<tr>
<td>Odor</td>
<td>Characteristic</td>
</tr>
</tbody>
</table>

Test method

- pH-Value: 2.5 (1%)

Changes in the physical state

- Flash point: n.a.
- Lower explosion limits: n.a.
- Upper explosion limits: n.a.
- Ignition temperature: n.a.

Oxidizing properties

- Vapor pressure: n.a. (at 20 °C)
- Water solubility: Soluble (at 20 °C)
- Partition coefficient: n.d.

Other information

- Bulk density: approx. 800 g/L

10. Stability and reactivity

Reactivity

No decomposition if stored and applied as directed.

Chemical stability

- Stability: Stable
  - Stable under normal conditions.

Possibility of hazardous reactions

- Hazardous reactions: Will not occur
- No hazardous reactions known.

Conditions to avoid

- Protect from moisture.

Incompatible materials

- No materials to be especially mentioned.

Hazardous decomposition products

- No hazardous decomposition products known.

11. Toxicological information

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

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

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

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.
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.

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

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.

12. Ecological information

Ecotoxicity
Citric acid:
LC50/Leuciscus idus/96 h: 440 - 706 mg/l
ECS50/Daphnia magna: 85 mg/l
Adipic acid:
LC50/Pimephales promelas/96 h: 97 mg/l

Persistence and degradability
Product is biodegradable.
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Mobility in soil
The product is soluble in water.

Other adverse effects
No data available.

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.

14. Transport information

US DOT 49 CFR 172.101
Proper shipping name: Not regulated.

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

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: 2
Flammability: 0
Physical Hazard: 0

NFPA Hazard Ratings
Health: 2
Flammability: 0
Reactivity: 0
Unique Hazard:
Revision date: 02.07.2014
Revision No: 1,0

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.
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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.)