

# Material safety datasheets



**Cleaner tablets for SelfCooking Center®**  
**Rinse aid tablets for SelfCooking Center®**



# Material Safety Data Sheet

## According to 91/155 EEC

Printing date 06.04.2009

Reviewed on 21.08.2007

### 1 Identification of substance:

- **Product details:**

- **Trade name:** Detergent-Tab for RATIONAL SelfCooking Center®

- **Product - No.:** 56,00,206; 56,00,210

- **Application of the substance / the preparation** Cleaning agent/ Cleaner

- **Manufacturer/Supplier:**

Rational AG  
Iglinger Straße 62  
D-86899 Landsberg



Tel.: ++49-(0)8191 - 32 70  
Fax: ++49-(0)8191 - 21735

- **Informing department:** Produktmanagement, E.mail: [reinigung@rational-online.de](mailto:reinigung@rational-online.de)

- **Emergency information:**

Internationale Giftzentrale Tel.: +49-(0)89-19240  
"Rechts der Isar"

### 2 Composition/Data on components:

- **Chemical characterization**

- **Description:** Mixture of the substances listed below with harmless products.

- **Dangerous components:**

CAS: 1310-73-2 EINECS: 215-185-5 EC Number: 011-002-00-6	Sodium hydroxide	C; R 35	> 20%
CAS: 6834-92-0 EINECS: 229-912-9 EC Number: 014-010-00-8	disodium metasilicate	C; R 34-37	> 10%
CAS: 497-19-8 EINECS: 207-838-8 EC Number: 011-005-00-2	sodium carbonate	Xi; R 36	10-<20%
	fatty alcohol alkoxyolate	Xi; R 38	1-<5%

- **Additional information** For the wording of the listed risk phrases refer to section 16.

### 3 Hazards identification

- **Hazard designation:**



C Corrosive

- **Information pertaining to particular dangers for man and environment**

R 35 Causes severe burns.

- **Classification system**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

### 4 First aid measures

- **General information** Instantly remove any clothing contaminated by the product.

- **After inhalation**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness bring patient into stable side position for transport.

- **After skin contact**

Instantly rinse with water.

Immediate medical treatment necessary. Failure to treat burns can prevent wounds from healing.

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**Trade name: Detergent-Tab for RATIONAL SelfCooking Center®**

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- **After eye contact** Rinse opened eye for several minutes under running water. Then consult doctor.
- **After swallowing**  
 Drink copious amounts of water and provide fresh air. Instantly call for doctor.  
 Do not induce vomiting; instantly call for medical help.

### 5 Fire fighting measures

- **Suitable extinguishing agents** Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents** None
- **Protective equipment:**  
 Wear self-contained breathing apparatus.  
 Wear full protective suit.
- **Additional information** Collect contaminated fire fighting water separately. It must not enter drains.

### 6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:**  
 Do not allow large quantities of product to reach sewage system or water bodies.
- **Measures for cleaning/collecting:**  
 Collect mechanically.  
 Dispose of contaminated material as waste according to item 13.

### 7 Handling and storage

- **Handling**
- **Information for safe handling:**  
 Prevent formation of dust.  
 Do not breathe dust.  
 Avoid skin and eye contact.  
 Make sure that all applicable workplace limits are observed.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and containers:**  
 Store only in the original container.  
 Observe all local and national regulations for storage of water polluting products.
- **Information about storage in one common storage facility:**  
 Do not store together with acids.  
 Store away from foodstuffs.
- **Further information about storage conditions:** Store in cool, dry conditions in well sealed containers.

### 8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

- **Components with critical values that require monitoring at the workplace:**

**1310-73-2 Sodium hydroxide**

OES (Great Britain) Short-term value: 2 mg/m<sup>3</sup>

- **Additional information:** The lists that were valid during the compilation were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures**  
 Keep away from foodstuffs, beverages and food.  
 Do not eat, drink or smoke while working.  
 Instantly remove any contaminated garments.

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**Trade name: Detergent-Tab for RATIONAL SelfCooking Center®**

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*Do not inhale dust / smoke / mist.*

*Avoid contact with the eyes and skin.*

*Wash hands during breaks and at the end of the work.*

· **Breathing equipment:** Not required.

· **Protection of hands:**

*Alkaline resistant gloves*

*The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.*

*Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.*

*Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.*

· **Material of gloves**

*The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.*

· **Penetration time of glove material**

*The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.*

· **Eye protection:** Tightly sealed safety glasses

· **Body protection:** Alkaline resistant protective clothing

### 9 Physical and chemical properties:

#### · General Information

<b>Form:</b>	Tablets
<b>Colour:</b>	White
<b>Smell:</b>	Product specific

#### · Change in condition

**Melting point/Melting range:** Not determined

**Boiling point/Boiling range:** Not determined

· **Flash point:** Not applicable

· **Self-inflammability:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive.

· **Density** Not determined

· **Settled apparent density at 20°C** ~ 1100 kg/m<sup>3</sup>

#### · Solubility in / Miscibility with

**Water:** Soluble

### 10 Stability and reactivity

· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

· **Materials to be avoided:** Acids

· **Dangerous reactions** Strong exothermic reaction with acids.

· **Dangerous products of decomposition:** No dangerous decomposition products known.

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Trade name: Detergent-Tab for RATIONAL SelfCooking Center®

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### 11 Toxicological information

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

**1310-73-2 Sodium hydroxide**

Oral	LD50	2000 mg/kg (rat)
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**6834-92-0 disodium trioxosilicate**

Oral	LD50	1280 mg/kg (rat)
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- **Primary irritant effect:**

- **on the skin:** Strong caustic effect on skin and mucous membranes.

- **on the eye:** Corrosive

- **Sensitization:** No sensitizing effect known

- **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:

Corrosive

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

### 12 Ecological information:

- **General notes:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

### 13 Disposal considerations

- **Product:**

- **Recommendation** Disposal must be made according to official regulations.

- **European waste catalogue**

Waste disposal key numbers from EWC have to be assigned depending on origin and processing. For that reason waste disposal key numbers different from that listed below may be possible.

20 00 00	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
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20 01 00	separately collected fractions (except 15 01)
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20 01 29	detergents containing dangerous substances
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- **Uncleaned packagings:**

- **Recommendation:**

Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.

- **Recommended cleaning agent:** Water, if necessary with cleaning agent.

### 14 Transport information

- **Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)**



- **ADR/RID-GGVS/E Class:** 8 (C6) Corrosive substances.

- **Kemler Number:** 80

- **UN-Number:** 3262

- **Packaging group:** II

- **Label** 8

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**Trade name: Detergent-Tab for RATIONAL SelfCooking Center®**

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· **Designation of goods:** UN 3262 CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE, disodium metasilicate)

· **Maritime transport IMDG/GGVSea:**



· **IMDG/GGVSea Class:** 8  
 · **UN Number:** 3262  
 · **Label** 8  
 · **Packaging group:** II  
 · **EMS Number:** F-A,S-B  
 · **Correct technical name:** CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE, disodium metasilicate)

· **Air transport ICAO-TI and IATA-DGR:**



· **ICAO/IATA Class:** 8  
 · **UN/ID Number:** 3262  
 · **Label** 8  
 · **Packaging group:** II  
 · **Correct technical name:** CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE, disodium metasilicate)

· **Transport/Additional information:** Transport by post may be prohibited or restricted.

### 15 Regulatory information

· **Designation according to EC guidelines:**  
 The product has been classified/labelled in accordance with EC Directives / relevant national laws.

· **Code letter and hazard designation of product:**



C Corrosive

· **Hazard-determining components of labelling:**

Sodium hydroxide  
 disodium trioxosilicate

· **Risk phrases:**

35 Causes severe burns.

· **Safety phrases:**

1/2 Keep locked up and out of the reach of children.  
 24/25 Avoid contact with skin and eyes.  
 28 After contact with skin, wash immediately with plenty of water.  
 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.  
 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

· **Ingredients according to Recommendation 89/542/EEC**

phosphates	15 - 30%
polycarboxylates, non-ionic surfactants	< 5%

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**Trade name: Detergent-Tab for RATIONAL SelfCooking Center®**

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- **National regulations**
- **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

## 16 Other information:

*These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

- **Relevant R-phrases**

*The(se) R-phrase(s) are those of the ingredient(s) and do(es) not necessarily represent the classification of the preparation.*

34 Causes burns.

35 Causes severe burns.

36 Irritating to eyes.

37 Irritating to respiratory system.

38 Irritating to skin.

- **Department issuing data specification sheet:**

Budich International GmbH      Phone: ++49-5223-9970-0

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D-32120 Hiddenhausen

- **Contact:**

GB

# Material Safety Data Sheet

## According to 91/155 EEC

Printing date 06.04.2009

Reviewed on 21.08.2007

### 1 Identification of substance:

· **Product details:**

· **Trade name:** Rinsing-Tab for RATIONAL SelfCooking Center®

· **Product - No.:** 56,00,208; 56,00,211

· **Application of the substance / the preparation** Clear rinsing agent / Wetting agent

· **Manufacturer/Supplier:**

Rational AG  
Iglinger Straße 62  
D-86899 Landsberg



Tel.: ++49-(0)8191 - 32 70  
Fax: ++49-(0)8191 - 21735

· **Informing department:** Produktmanagement, E.mail: [reinigung@rational-online.de](mailto:reinigung@rational-online.de)

· **Emergency information:**

Internationale Giftzentrale Tel.: +49-(0)89-19240  
"Rechts der Isar"

### 2 Composition/Data on components:

· **Chemical characterization**

· **Description:** Mixture of the substances listed below with harmless products.

· **Dangerous components:**

CAS: 5949-29-1	Citric acid, monohydrate	Xi; R 36	20-<50%
EINECS: 201-069-1			
	fatty alcohol alkoxylate	Xi; R 38	1-<5%

· **Additional information** For the wording of the listed risk phrases refer to section 16.

### 3 Hazards identification

· **Hazard designation:**



*Xi Irritant*

· **Information pertaining to particular dangers for man and environment**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.  
R 36 Irritating to eyes.

### 4 First aid measures

- **After inhalation** Supply fresh air; consult doctor in case of symptoms.
- **After skin contact** Rinse with plenty of water.
- **After eye contact** Rinse opened eye for several minutes under running water. Then consult doctor.
- **After swallowing**  
Rinse out mouth and then drink plenty of water.  
Seek immediate medical advice.

### 5 Fire fighting measures

- **Suitable extinguishing agents** Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents** None
- **Special hazards caused by the material, its products of combustion or flue gases:**  
Carbon monoxide and carbon dioxide
- **Protective equipment:** Put on breathing apparatus.

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**Trade name: Rinsing-Tab for RATIONAL SelfCooking Center®**

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- **Additional information** Collect contaminated fire fighting water separately. It must not enter drains.

### 6 Accidental release measures

- **Person-related safety precautions:** Avoid contact with eyes.
- **Measures for environmental protection:**  
Do not allow large quantities of product to reach sewage system or water bodies.
- **Measures for cleaning/collecting:** Collect mechanically.

### 7 Handling and storage

- **Handling**
- **Information for safe handling:** Avoid contact with eyes.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and containers:**  
Observe all local and national regulations for storage of water polluting products.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.

### 8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with critical values that require monitoring at the workplace:**  
Observe all workplace limits for dust:  
OEL total dust: 10 mg/m<sup>3</sup>  
OEL respirable dust: 3 mg/m<sup>3</sup>
- **Additional information:** The lists that were valid during the compilation were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures**  
Keep away from foodstuffs, beverages and food.  
Do not eat, drink or smoke while working.  
Avoid close or long term contact with the skin.  
Avoid contact with the eyes.  
Wash hands during breaks and at the end of the work.
- **Breathing equipment:** Not required.
- **Protection of hands:**  
Protective gloves  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
- **Material of gloves**  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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**Trade name: Rinsing-Tab for RATIONAL SelfCooking Center®**

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- **Eye protection:** Tightly sealed safety glasses

### 9 Physical and chemical properties:

#### · General Information

<b>Form:</b>	Tablets
<b>Colour:</b>	White
<b>Smell:</b>	Product specific

#### · Change in condition

**Melting point/Melting range:** Not determined  
**Boiling point/Boiling range:** Not determined

· **Flash point:** Not applicable

· **Self-inflammability:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive.

· **Density** Not determined

· **Solubility in / Miscibility with Water:** Soluble

### 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Materials to be avoided:** Strong oxidizing agents
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous products of decomposition:** Carbon monoxide and carbon dioxide

### 11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Slightly irritating
- **on the eye:** Irritant effect
- **Sensitization:** No sensitizing effect known
- **Additional toxicological information:**  
 The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:  
 Irritant

### 12 Ecological information:

- **Information about elimination (persistence and degradability):**
- **Other information:** The product is biodegradable.
- **General notes:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

### 13 Disposal considerations

- **Product:**
- **Recommendation** Disposal must be made according to official regulations.

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**Trade name: Rinsing-Tab for RATIONAL SelfCooking Center®**

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· **European waste catalogue**

Waste disposal key numbers from EWC have to be assigned depending on origin and processing. For that reason waste disposal key numbers different from that listed below may be possible.

20 00 00	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 01 00	separately collected fractions (except 15 01)
20 01 29	detergents containing dangerous substances

· **Uncleaned packagings:**

· **Recommendation:**

Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.

### 14 Transport information

· **Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)**

· **ADR/RID-GGVS/E Class:** -

· **Maritime transport IMDG/GGVSea:**

· **IMDG/GGVSea Class:** -

· **Air transport ICAO-TI and IATA-DGR:**

· **ICAO/IATA Class:** -

· **Transport/Additional information:** Not dangerous according to the above specifications.

### 15 Regulatory information

· **Designation according to EC guidelines:**

The product has been classified/labelled in accordance with EC Directives / relevant national laws.

· **Code letter and hazard designation of product:**



*Xi Irritant*

· **Risk phrases:**

36 Irritating to eyes.

· **Safety phrases:**

2 Keep out of the reach of children.

25 Avoid contact with eyes.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

46 If swallowed, seek medical advice immediately and show this container or label.

· **Ingredients according to Recommendation 89/542/EEC**

non-ionic surfactants	< 5%
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· **National regulations**

· **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

### 16 Other information:

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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· **Relevant R-phrases**

The(se) R-phrase(s) are those of the ingredient(s) and do(es) not necessarily represent the classification of the preparation.

36 Irritating to eyes.

38 Irritating to skin.

· **Department issuing data specification sheet:**

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