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Yes

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SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1. Product identifier Trade name Cleaner tab Article No. 56.00.210, 56.00.210M, 56.00.220 UFI code 7JYF-YTCJ-4T0J-UXCK 1.2. Relevant identified uses of the substance or mixture and uses advised against Relevant identified uses Cleaner tab for all RATIONAL SelfCookingCenter® and CombiMaster® Plus models with automatic cleaning for professional users. Not suitable for use in All other uses are discouraged. 1.3. Details of the supplier of the safety data sheet Supplier RATIONAL AG Address Siegfried-Meister-Straße 1 86899 Landsberg am Lech Germany Telephone +49 8191 327 387 Email reinigung@rational-online.com Fax +49 8191 327 231 Web site www.rational-online.com 1.4. Emergency telephone number Emergency CONTACT (24-Hour-Number): +49 6132 844 63 Available outside office hours

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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Skin corrosion, hazard category 1A Serious eye damage, hazard category 1

Hazard statements

H314, H318

2.2. Label elements

Hazard pictograms



Signal word Danger

Hazard statements

H314 Causes severe skin burns and eye damage.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
P280 Wear protective gloves/eye protection.
P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P501 Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

More information

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

2.3. Other hazards

This mixture does not contain any substances that are classified as PBT or vPvB.

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SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical name	CAS No.	Concentration	Classification	H-phrase M factor acute M factor chronic	Note
sodium hydroxide	1310-73-2	30 - 50%	Skin Corr. 1A	H314 - -	Skin Corr. 1A; H314: $C \ge 5 \%$ Skin Corr. 1B; H314: $2 \% \le C$ < 5 % Skin Irrit. 2; H315: $0,5 \% \le C < 2 \%$ Eye Irrit. 2; H319: $0,5 \% \le C < 2 \%$;
disodium metasilicate	6834-92-0	10 - 20%	Skin Corr. 1B, STOT SE 3 - resp. tract irrit.	H314, H335 - -	-
sodium carbonate	497-19-8	10 - 20%	Eye Irrit. 2	H319 - -	-
fatty alcohol alkoxylate	111190-40-0	1 - <2.5%	Eye Dam. 1, Aquatic Acute 1, Aquatic Chronic 3	H318, H400, H412 - -	-

Substance additional information

For the complete text of H-statements mentioned in this section, see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Description of first aid measures

First responders: Pay attention to self-protection.

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Inhalation

Take the victim into fresh air. If symptoms persist, call a physician.

Skin contact

In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention immediately if irritation develops and persists.

Eye contact

Call a physician immediately. In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Ingestion

Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting. Get medical attention immediately.

Information for doctors

For specialist advice physicians should contact the Poisons Information Service.

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

Immediate effects can be expected after long-term exposure.

Inhalation

Not applicable.

<u>Skin contact</u> Causes burns.

<u>Eye contact</u> May cause irreversible eye damage.

Ingestion

If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach.

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

Treat symptomatically.

Show this safety data sheet to the doctor in attendance.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water spray, dry powder, foam, carbon dioxide (CO2). Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

Do not use a solid water stream as it may scatter and spread fire.

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5.2. Special hazards arising from the substance or mixture

Corrosive.

Hazardous decomposition products formed under fire conditions.

5.3. Advice for firefighters

Special protective equipment for fire-fighters

In the event of fire, wear self contained breathing apparatus.

Measures in case of fire

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protective equipment. Avoid direct contact with the material / product.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3. Methods and material for containment and cleaning up

Use mechanical handling equipment. Dispose of as hazardous waste in compliance with local and national regulations.

6.4. Reference to other sections

For information on storage and handling see section 7. For information on exposure and personal protective equipment, see Section 8. For information on incompatible materials, see Section 10. For information on disposal see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Preventive handling precautions

Wear personal protective equipment. Avoid direct contact with the material / product.

General hygiene

Wash hands after handling. When using, do not eat, drink or smoke. The usual precautionary measures when handling chemicals must be observed.

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7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and animal feeding stuffs. Store in a place accessible by authorized persons only. Keep out of reach of children.

Storage class according to TRGS 510: 8B (non-flammable, corrosive hazardous substances)

Suitable container and packaging materials for safe storage: store in original container.

Storage temperature: 10°C to 40°C

7.3. Specific end use(s)

PC35: Detergents and cleaning products (including solvent-based products) See section Cleaner tab

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits

No information available.

8.2. Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.

Eye / face protection

Chemical-resistant safety glasses with side protection conforming to EN166.

Hand protection

Chemical-resistant protective gloves (EN 374)

Suitable material: Butyl (butyl rubber) or NBR (nitrile rubber), category III according to EN 374.

The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

Other skin protection

This type of personal protective equipment is not necessary under normal and foreseeable use of the product.

Respiratory protection

This type of personal protective equipment is not necessary under normal and foreseeable use of the product.

Thermal hazards

Not applicable

Environmental exposure controls

No special environmental precautions required.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<u>Physical state</u> Tablet

<u>Colour</u> White

<u>Odour</u> Characteristic

<u>Melting point / freezing point</u> Not applicable.

Boiling point or initial boiling point and boiling range Not applicable.

Flammability Not applicable.

Lower and upper explosion limit The product / mixture has no explosive properties.

<u>Flash point</u> No data available

<u>Auto-ignition temperature</u> Not applicable.

Decomposition temperature No information available.

<u>рН</u>

12.7 **Method** 1 % aqueous solution

Kinematic viscosity Not applicable.

<u>Viscosity, dynamic</u> No information available.

<u>Solubility</u> Water soluble

<u>Water solubility</u> Completely soluble

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Partition coefficient n-octanol/water

No information available.

Vapour pressure

Not applicable.

Density and/or relative density 1050 kg/m³

Method Bulk density

<u>*Relative density*</u> No information available.

<u>Relative vapour density</u> Not applicable.

Evaporation Rate Not applicable.

<u>Explosive properties</u> The product / mixture has no explosive properties.

Oxidising properties

The product / mixture has no oxidizing properties.

<u>VOC %</u>

< 3 %

Particle characteristics

This product / mixture does not contain any nanomaterials or nanoforms.

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable at normal conditions.

10.2. Chemical stability

The product is chemically stable.

10.3. Possibility of hazardous reactions

None under normal use.

10.4. Conditions to avoid

Protect from moisture. Protect from frost, heat and sunlight.

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10.5. Incompatible materials

Strong acids Light metals Oxidizing agent

10.6. Hazardous decomposition products

For information on combustion products, see Section 5.

Hazardous decomposition products formed under fire conditions.

SECTION 11: Toxicological information

11.1. Information on hazard classes

No data is available on the product itself. Toxicology data for the components.

Acute toxicity

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

Product / Sub- stance name CAS no.	Dose descriptor	Value / Dose	Exposure route	Duration of expos- ure	Test animals
disodium metasilic- ate 6834-92-0	LD50	1.150 - 1.350mg/kg 770 - 820 mg/kg	Oral	-	rat mouse
sodium carbonate 497-19-8	LD50	2.800 mg/kg	Oral	-	rat
sodium carbonate 497-19-8	LD50	>2.000mg/kg	Dermal	-	rabbit
sodium carbonate 497-19-8	LC50	2.300 mg/m ³	Inhalativ	2h	rat
fatty alcohol alkoxylate 111190-40-0	LD50	>2.000 - 5.000 mg/kg	Oral	-	rat

Skin corrosion/irritation

Causes severe skin burns.

Serious eye damage/irritation

Causes severe eye burns.

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Respiratory or skin sensitisation

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

Germ cell mutagenicity

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

Carcinogenicity

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

Repeated dose toxicity

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

Reproductive toxicity

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

STOT-single exposure

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

<u>STOT-repeated exposure</u> Based on the available data, the classification criteria are not met.

<u>Aspiration hazard</u> Based on the available data, the classification criteria are not met.

11.2. Information on other hazards

Endocrine disrupting properties

The mixture / product does not contain any ingredients with endocrine disrupting properties.

SECTION 12: Ecological information

12.1. Toxicity

<u>Toxicity</u>

No data is available on the product itself. Toxicology data for the components.

Acute fish toxicity

Product / Substance name CAS no.	Measurement type	Value / Result	Duration of exposure	Species
sodium carbonate 497-19-8	LC50	300 mg/l	96h	Lepomis macrochirus
fatty alcohol alkoxylate 111190-40-0	LC50	<1 mg/l	96h	Leuciscus idus

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Product / Substance name CAS no.	Measurement type	Value / Result	Duration of exposure	Species
disodium metasilicate 6834-92-0	LC50	210 mg/l	96h	Brachydanio rerio

Acute algae toxicity

Product / Sub- stance name CAS no.	Measurement type	Value / Result	Duration of expos- ure	Species	Method / Guideline
disodium metasilic- ate 6834-92-0	EC50	207 mg/l	72h	Chlorella pyren- oidosa	-
fatty alcohol alkoxylate 111190-40-0	EC50	<1 mg/l	72h	Scenedesmus sub- spicatus	OECD 201

Acute crustacean toxicity

Product / Sub- stance name CAS no.	Measurement type	Value / Result	Duration of expos- ure	Species	Remark
sodium hydroxide 1310-73-2	EC50	40,4 mg∕l	48 h	Ceriodaphnia dubia	ECHA
disodium metasilic- ate 6834-92-0	EC50	1.700 mg⁄l	48h	Daphnia magna	-
sodium carbonate 497-19-8	EC50	200-227 mg/l	48h	Ceriodaphnia dubia	-
fatty alcohol alkoxylate 111190-40-0	EC50	<1 mg/l	48h	Daphnia magna	-

Micro-/macro organism toxicity

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Product / Substance name CAS no.	Measurement type	Value / Result	Duration of exposure	Species
disodium metasilicate 6834-92-0	EC50	>100 mg/l	3h	Bacteria (activated sludge)

12.2. Persistence and degradability

Persistence and degradability

The surfactants contained in this mixture / product meet the requirements for biodegradability. Readily biodegradable, according to appropriate OECD test. OECD test guideline: 301 B (CO2 Evolution Test)

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

This mixture does not contain any substances that are classified as PBT or vPvB.

12.6. Endocrine disrupting properties

The mixture / product does not contain any ingredients with endocrine disrupting properties.

12.7. Other adverse effects

Other adverse effects

Neutralization is normally necessary before waste water is discharged into water treatment plants. Neutralisation will reduce ecotoxic effects.

Other

This product / mixture does not contain any substances that deplete the ozone layer.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal considerations

Dispose of as hazardous waste in compliance with local and national regulations.

Packaging

Empty containers should be taken for local recycling, recovery or waste disposal. Contaminated packaging / sheets: Dispose of as unused product.

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Waste code	Waste description
20 01 29*	detergents containing hazardous substances

SECTION 14: Transport information

14.1. UN number

3262

14.2. UN proper shipping name

ADR / RID / ADN proper shipping name

3262 - Corrosive solid, basic, inorganic, n.o.s. (sodium hydroxide , disodium metasilicate)

(souldin nyu oxide , disodidin metasilica

IMDG proper shipping name

CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE, DISODIUM METASILICATE)

14.3. Transport hazard class(es)

<u>Label</u> ADR/RID/ADN



ADR / RID Class

8

<u>ADR / RID Classification code</u> C6

<u>ADR / RID hazard identification number</u> 80

IMDG Class

8

<u>IATA Class</u>

8

ADN Class

8

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	ADN Class Code
	C6
14	I.4. Packing group
	II
14	I.5. Environmental hazards
	Environmental hazards
	Νο
	IMDG Marine Pollutant
	Νο
14	I.6. Special precautions for user
	IMDG EmS
	F-A, S-B
14	I.7. Maritime transport in bulk according to IMO instruments
	not applicable
Ot	ther
	Additional information ADR-RID
	LQ: 1 kg
	EQ: E2
	Transport category (tunnel restriction code): 2 (E)

SECTION 15: Regulatory information

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

National regulations

In addition, comply with all national and local regulations for the handling of chemicals.

15.2. Chemical safety assessment

The mixture has not been subjected to a safety assessment.

SECTION 16: Other information

<u>Changes to previous revision</u> SECTION 1: Change in product identifier (1.1)

Abbreviations

ADN - European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway ADR - The European Agreement concerning the International Carriage of Dangerous Goods by Road CAS - Chemical Abstract Service

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CLP - Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] DMEL - Derived Minimum Effect Level **DNEL - Derived No Effect Level** EC50 - Half maximal effective concentration 50% GHS - Globally Harmonized System of Classification and Labelling of Chemicals IATA - International Air Transport Association IMDG - International Maritime Dangerous Goods LC50 - Lethal concentration 50% LD50 - Lethal dosis 50 % MARPOL - International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978. ("Marpol" - marine pollution) PBT - Persistent, bioaccumulative and toxic substance PEC - Predicted Environmental Concentration PNEC - Predicted No Effect Concentration REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals RID - The regulations concerning the International Carriage of Dangerous Goods by Rail SVHC - Substance of Very High Concern vPvB - Very persistent, very bioaccumulative substance References to key literature and data sources **REACH** registration dossiers ECHA C&L - Inventory Safety data sheets from raw material suppliers **Evaluation methods for classification** Classification for mixtures and used evaluation method according to Article 9 of regulation (EC) 1272/2008 [CLP]: Health hazards: calculation method

Phrase meaning

Skin Corr. 1A - Skin corrosion, hazard category 1A Eye Dam. 1 - Serious eye damage, hazard category 1 Skin Corr. 1B - Skin corrosion, hazard category 1B STOT SE 3 - resp. tract irrit. - Specific Target Organ Toxicity — Single exposure, hazard category 3 - respiratory tract irritation Eye Irrit. 2 - Eye irritation, hazard category 2 Aquatic Acute 1 - Hazardous to the aquatic environment — Acute hazard category 1 Aquatic Chronic 3 - Hazardous to the aquatic environment - Chronic hazard category 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. H412 Harmful to aquatic life with long lasting effects.

Manufacturer's notes

Legal disclaimer: The above information is believed to be correct. This company shall not be held liable for any damage resulting from handling or from contact with the above product.