

SAFETY DATA SHEET

Version number: 8
Issued: 2022-11-07
Replaces SDS: 2022-04-26

According to Regulation (EC) No 1907/2006



Rinse agent

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

1.1. Product identifier

Trade name

Rinse agent

Article No.

56.00.211; 56.01.904

UFI code

45KD-KTCV-UJ18-7HF9

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

Product type

Rinse aid tab for all RATIONAL SelfCookingCenter® models without Efficient CareControl and CombiMaster® Plus models with automatic cleaning for professional users.

Relevant identified uses

All other uses are discouraged.

1.3. Details of the supplier of the safety data sheet

Supplier EU

RATIONAL AG

Street 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

UK-Supplier

RATIONAL UK Ltd.

Street address

Titan Court, Unit 4
Laporte Way, Portenway Business Parks
Luton, Bedfordshire, LU 4 8EF
United Kingdom

Telephone

+44 1582 480 388

1.4. Emergency telephone number

SOS Notruf/Emergency CONTACT (24-Hour-Hotline): +49 6132 844 63

Available outside office hours

Yes

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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Classification

Eye irritation, hazard category 2

Specific Target Organ Toxicity — Single exposure, hazard category 3 - respiratory tract irritation

Hazard statements

H319, H335

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms



Signal word

Warning

Hazard statements

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

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

P337 + P313 If eye irritation persists: Get medical advice/attention.

More information

Hazard components for labeling: Citric acid

2.3. Other hazards

This mixture does not contain any substances that are classified as PBT or vPvB according to Article 57 / Annex XIII of the REACH regulation.

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SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical name	CAS No. EC No. REACH No. Index No.	Concentration	Classification	H-phrase M factor acute M factor chronic	Note
citric acid	77-92-9 201-069-1 01-2119457026-42-xxxx -	20 - 50%	Eye Irrit. 2, STOT SE 3 - resp. tract irrit.	H319, H335 - -	-
alcohols, C12-15-branched and linear, ethoxylated propoxylated	120313-48-6 - 02-2119548508-30-xxxx -	1 - 5%	Skin Irrit. 2	H315 - -	-

Substance additional information

For the complete text of H- / EUH-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.

Inhalation

Not applicable.

Skin contact

Wash off with soap and water. In the case of skin irritation or allergic reactions see a physician.

Eye contact

Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Ingestion

Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting. Consult a physician if necessary.

Information for doctors

For specialist advice physicians should contact the Poisons Information Service.

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

Immediate effects can be expected after long-term exposure.

Inhalation

Not applicable.

Skin contact

May cause skin irritation.

Eye contact

Eye irritation, cloudy / blurred field of vision, excessive lachrymation.

Ingestion

Nausea, vomiting, gastrointestinal discomfort.

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.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products formed under fire conditions.

5.3. Advice for firefighters

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

Measures in case of fire

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

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.

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6.2. Environmental precautions

Not required.

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

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

General hygiene

Wash hands after handling.

When using, do not eat, drink or smoke.

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

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: 13 (non-combustible solids)

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 1.2: Rinse aid tab for all SCC models

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

PNEC/PEC

Product/Substance name (CAS No./EC No.)	Type	Environmental compartment	Value
citric acid (77-92-9/201-069-1)	PNEC	Freshwater	0.44 mg/l
citric acid (77-92-9/201-069-1)	PNEC	Marine water	0.044 mg/l
citric acid (77-92-9/201-069-1)	PNEC	Sewage Treatment Plant	1000 mg/l
citric acid (77-92-9/201-069-1)	PNEC	Sediment (freshwater)	34.6 mg/kg
citric acid (77-92-9/201-069-1)	PNEC	Sediment (marine water)	3.46 mg/kg
citric acid (77-92-9/201-069-1)	PNEC	Soil	33.1 mg/kg

8.2. Exposure controls

Appropriate engineering controls

Not required.

Eye / face protection

Safety glasses with side-shields conforming to EN166

Hand protection

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

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

Physical state

Tablet

Colour

White

Odour

Characteristic

Melting point / freezing point

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.

Flash point

No data available

Auto-ignition temperature

Not applicable.

Decomposition temperature

No information available.

pH

2.7

Method

1 % aqueous solution

Kinematic viscosity

Not applicable.

Viscosity, dynamic

Not applicable.

Solubility

Water soluble

Water solubility

Completely soluble

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Partition coefficient n-octanol/water

No information available.

Vapour pressure

Not applicable.

Density and/or relative density

1015 - 1215 kg/m³

Method

Bulk density

Relative vapour density

Not applicable.

Evaporation Rate

Not applicable.

Explosive properties

The product / mixture has no explosive properties.

Oxidising properties

The product / mixture has no oxidizing properties.

VOC %

< 3 %

Particle characteristics

This product / mixture does not contain any nanomaterials or nanoforms as defined in Regulation (EC) 1907/2006.

9.2. Other information

No information 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.

10.5. Incompatible materials

Not applicable.

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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 as defined in Regulation (EC) No 1272/2008

Toxicology data for the components.

Acute toxicity

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

Product / Substance name CAS / EC no.	Dose descriptor	Value / Dose	Exposure route	Test animals	Method / Guideline	Remarks
citric acid 77-92-9 / 201- 069-1	LD50	5.400 mg/kg	Oral	mouse	OECD 401	ECHA
citric acid 77-92-9 / 201- 069-1	LD50	>2.000 mg/kg	Dermal	rat	OECD 402	ECHA
alcohols, C12- 15-branched and linear, ethoxylated propoxylated 120313-48-6 /	LD50	>2.000 mg/kg	Oral	rat	-	-

Skin corrosion/irritation

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

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

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

Germ cell mutagenicity

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

Genotoxicity

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

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Carcinogenicity

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

May cause respiratory irritation.

STOT-repeated exposure

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

Aspiration hazard

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 in terms of regulations (EC) 1907/2006 and (EU) 2018/605 and the delegated regulation (EU) 2017/2100.

SECTION 12: Ecological information

12.1. Toxicity

Toxicity

Toxicology data for the components.

Acute fish toxicity

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species	Method / Guideline	Remark
alcohols, C12- 15-branched and linear, ethoxylated propoxylated 120313-48-6 /	LC50	>1 - 10 mg/l	96h	Leuciscus idus	-	-
citric acid 77-92-9 / 201- 069-1	LC50	440 mg/l	48 h	Leuciscus idus	OECD 203	ECHA

Acute crustacean toxicity

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Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species	Remark
citric acid 77-92-9 / 201- 069-1	LC50	1.535 mg/l	24 h	Daphnia magna	ECHA
alcohols, C12-15- branched and linear, ethoxylated propoxylated 120313-48-6 /	EC50	>1 - 10 mg/l	48h	Daphnia magna	-

12.2. Persistence and degradability

Persistence and degradability

Readily biodegradable, according to appropriate OECD test.

OECD test guideline: 301 B (CO₂ Evolution test)

The surfactants contained in this mixture / product meet the requirements for biodegradability in accordance with Regulation (EC) No. 648/2004 on detergents.

12.3. Bioaccumulative potential

Bioaccumulative potential

No information available.

12.4. Mobility in soil

Mobility

No information available.

12.5. Results of PBT and vPvB assessment

This mixture does not contain any substances that are classified as PBT or vPvB according to Article 57 / Annex XIII of the REACH regulation.

12.6. Endocrine disrupting properties

The mixture / product does not contain any ingredients with endocrine disrupting properties in terms of regulations (EC) 1907/2006 and (EU) 2018/605 and the delegated regulation (EU) 2017/2100.

12.7. Other adverse effects

Other adverse effects

This product / mixture does not contain any substances within the meaning of Regulation (EC) No. 1005/2009 that deplete the ozone layer.

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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.

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

Please note - an asterisk (*) next to a code denotes that it is HAZARDOUS WASTE.

SECTION 14: Transport information

14.1. UN number

No dangerous goods in the sense of the transport regulations

14.2. UN proper shipping name

ADR / RID / ADN proper shipping name

No dangerous goods in the sense of the transport regulations

14.3. Transport hazard class(es)

Label

No dangerous goods in the sense of the transport regulations

14.4. Packing group

No dangerous goods in the sense of the transport regulations

14.5. Environmental hazards

Environmental hazards

No dangerous goods in the sense of the transport regulations

14.6. Special precautions for user

Special precautions for user

No dangerous goods in the sense of the transport regulations

14.7. Maritime transport in bulk according to IMO instruments

Not applicable.

Other

Not applicable

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SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No. 648/2004 (detergents)

Ingredients according to Annex VII: <5% non-ionic surfactants

Regulation (EC) No. 1272/2008 (CLP)

Regulation (EC) No. 1907/2006 (REACH)

Substances subject to authorization according to Annex XIV: Not applicable.

Substance restrictions according to Annex XVII: Not applicable.

Substances on the REACH candidate list (SVHC): Not applicable.

Regulation (EU) No. 528/2012 (BPR)

Active ingredients: Not applicable.

Regulation (EU) 2019/1148 (explosives)

Restricted raw material according to Annex I: Not applicable.

Notifiable raw materials according to Annex II: Not applicable.

Directive 2011/65 / EU (ROHS 2)

Substance restrictions according to Annex II: Not applicable.

Regulation (EU) 2019/1021 (POP)

Persistent organic pollutants: Not applicable.

Directive 2012/18/EU (Seveso III)

Seveso hazard category: Not applicable.

National regulations

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

Other regulations, limitations and legal regulations

Take note of Dir 94/33/EC on the protection of young people at work.

15.2. Chemical safety assessment

The mixture has not been subjected to a safety assessment.

SECTION 16: Other information

Changes to previous revision

Section 2 & 3: Change in classification and labeling.

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Abbreviations

ADN - Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
ADR - Accord relatif au transport international des marchandises Dangereuses par Route
CAS - Chemical Abstract Service
CLP - Classification, Labelling and Packaging
DMEL - Derived Minimum Effect Level
DNEL - Derived no effect level
EC50 - Half maximal effective concentration 50%
GHS - Globally Harmonised System
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
PBT - Persistent, bioaccumulative and toxic substance
PEC - Predicted Environmental Concentration
PNEC - predicted no effect concentration
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals
RID - Reglement concernant le transport international ferroviaire de marchandises Dangereuses
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

Eye Irrit. 2 - Eye irritation, hazard category 2
STOT SE 3 - resp. tract irrit. - Specific Target Organ Toxicity — Single exposure, hazard category 3 - respiratory tract irritation
Skin Irrit. 2 - Skin irritation, hazard category 2
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Other

Additional information

This safety data sheet is prepared in accordance with Commission Regulation (EU) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878.

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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.