

SAFETY DATA SHEET

Version number: 5.1
Issued: 2024-11-25
Replaces SDS: 2022-11-07

According to Regulation (EC) No 1907/2006



Active Green cleaner tab

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

1.1. Product identifier

Trade name

Active Green cleaner tab

Article No.

56.01.535; 56.01.628; 56.01.535C; 56.01.628C; 56.01.527; 56.01.904

UFI code

HYGR-V6WC-C239-AN9Y

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

Relevant identified uses

RATIONAL Active Green cleaner tab for iHexagon, iCombi Pro, iCombi Classic and SelfCookingCenter® models with Efficient CareControl and CombiMaster® Plus models with automatic cleaning for commercial use.

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-Hotline): +49 6132 844 63

Available outside office hours

Yes

SAFETY DATA SHEET

Version number: 5.1
Issued: 2024-11-25
Replaces SDS: 2022-11-07

According to Regulation (EC) No 1907/2006



Active Green cleaner tab

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Classification

Skin corrosion, hazard category 1A

Serious eye damage, hazard category 1

Corrosive to metals, hazard category 1

Hazard statements

H290, H314, H318

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms



Signal word

Danger

Hazard statements

H290 May be corrosive to metals.

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

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.

SAFETY DATA SHEET

Version number: 5.1
Issued: 2024-11-25
Replaces SDS: 2022-11-07

According to Regulation (EC) No 1907/2006



Active Green cleaner tab

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
sodium hydroxide	1310-73-2 215-185-5 01-2119457892- 27-xxxx 011-002-00-6	50 - <65%	Skin Corr. 1A	H314 - -	Skin Corr. 1A; H314: C ≥ 5 % Skin Corr. 1B; H314: 2 % ≤ C < 5 % Skin Irrit. 2; H315: 0,5 % ≤ C < 2 % Eye Irrit. 2; H319: 0,5 % ≤ C < 2 %;
sodium carbonate	497-19-8 207-838-8 01-2119485498- 19-xxxx 011-005-00-2	5 - 10%	Eye Irrit. 2	H319 - -	-
disodium metasilicate	6834-92-0 229-912-9 01-2119449811- 37-xxxx 014-010-00-8	1 - 5%	Skin Corr. 1B, STOT SE 3 - resp. tract irrit.	H314, H335 - -	-

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

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.

SAFETY DATA SHEET

Version number: 5.1
Issued: 2024-11-25
Replaces SDS: 2022-11-07

According to Regulation (EC) No 1907/2006



Active Green cleaner tab

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.

Skin contact

Causes burns.

Eye contact

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.

5.2. Special hazards arising from the substance or mixture

Corrosive.

Hazardous decomposition products formed under fire conditions.

SAFETY DATA SHEET

Version number: 5.1
Issued: 2024-11-25
Replaces SDS: 2022-11-07

According to Regulation (EC) No 1907/2006



Active Green cleaner tab

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.

SAFETY DATA SHEET

Version number: 5.1
Issued: 2024-11-25
Replaces SDS: 2022-11-07

According to Regulation (EC) No 1907/2006



Active Green cleaner tab

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 Active Green

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL/DMEL

Product/Substance name (CAS No./EC No.)	Type	Exposure	Value	Population	Effects
sodium hydroxide (1310-73-2/215-185-5)	DNEL	Chronic (long term) Inhalation	1 mg/m ³	Workers	Local
sodium carbonate (497-19-8/207-838-8)	DNEL	Chronic (long term) Inhalation	10 mg/m ³	Workers	Local
disodium metasilicate (6834-92-0/229-912-9)	DNEL	Chronic (long term) Dermal	1.49 mg/kg	Workers	Systemic
disodium metasilicate (6834-92-0/229-912-9)	DNEL	Chronic (long term) Inhalation	6.22 mg/m ³	Workers	Systemic
disodium metasilicate (6834-92-0/229-912-9)	DNEL	Chronic (long term) Oral	0.74 mg/kg	Consumers	Systemic

PNEC/PEC

Product/Substance name (CAS No./EC No.)	Type	Environmental compartment	Value
disodium metasilicate (6834-92-0/229-912-9)	PNEC	Freshwater	7.5 mg/l

SAFETY DATA SHEET

Version number: 5.1
Issued: 2024-11-25
Replaces SDS: 2022-11-07

According to Regulation (EC) No 1907/2006



Active Green cleaner tab

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.

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.

SAFETY DATA SHEET

Version number: 5.1
Issued: 2024-11-25
Replaces SDS: 2022-11-07

According to Regulation (EC) No 1907/2006



Active Green cleaner tab

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

12.5

Method

1 % aqueous solution

Kinematic viscosity

Not applicable.

Viscosity, dynamic

Not applicable.

Solubility

Water soluble

Water solubility

Completely soluble

Partition coefficient n-octanol/water

No information available.

Vapour pressure

Not applicable.

Density and/or relative density

1050 kg/m³

Method

Bulk density

Relative density

No information available.

Relative vapour density

Not applicable.

Evaporation Rate

Not applicable.

SAFETY DATA SHEET

Version number: 5.1
Issued: 2024-11-25
Replaces SDS: 2022-11-07

According to Regulation (EC) No 1907/2006



Active Green cleaner tab

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. Protect from frost, heat and sunlight.

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 as defined in Regulation (EC) No 1272/2008

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

Acute toxicity

SAFETY DATA SHEET

Version number: 5.1
Issued: 2024-11-25
Replaces SDS: 2022-11-07

According to Regulation (EC) No 1907/2006



Active Green cleaner tab

Product / Substance name CAS / EC no.	Dose descriptor	Value / Dose	Exposure route	Duration of exposure	Test animals
disodium metasilicate 6834-92-0 / 229-912-9	LD50	1.150 - 1.350mg/kg 770 - 820 mg/kg	Oral	-	rat mouse
sodium carbonate 497-19-8 / 207-838-8	LD50	2.800 mg/kg	Oral	-	rat
sodium carbonate 497-19-8 / 207-838-8	LD50	>2.000mg/kg	Dermal	-	rabbit
sodium carbonate 497-19-8 / 207-838-8	LC50	2.300 mg/m ³	Inhalativ	2h	rat

Skin corrosion/irritation

Causes severe skin burns.

Serious eye damage/irritation

Causes severe eye burns.

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.

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.

SAFETY DATA SHEET

Version number: 5.1
Issued: 2024-11-25
Replaces SDS: 2022-11-07

According to Regulation (EC) No 1907/2006



Active Green cleaner tab

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

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

Acute fish toxicity

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species
sodium carbonate 497-19-8 / 207-838-8	LC50	300 mg/l	96h	Lepomis macrochirus
disodium metasilicate 6834-92-0 / 229-912-9	LC50	210 mg/l	96h	Brachydanio rerio

Acute algae toxicity

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species
disodium metasilicate 6834-92-0 / 229-912-9	EC50	207 mg/l	72h	Chlorella pyrenoidosa

Acute crustacean toxicity

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species	Remark
disodium metasilicate 6834-92-0 / 229-	EC50	1.700 mg/l	48h	Daphnia magna	-

SAFETY DATA SHEET

Version number: 5.1
Issued: 2024-11-25
Replaces SDS: 2022-11-07

According to Regulation (EC) No 1907/2006



Active Green cleaner tab

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species	Remark
912-9					
sodium carbonate 497-19-8 / 207-838-8	EC50	200-227 mg/l	48h	Ceriodaphnia dubia	-
sodium hydroxide 1310-73-2 / 215-185-5	EC50	40,4 mg/l	48 h	Ceriodaphnia dubia	ECHA

Micro-/macro organism toxicity

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species
disodium metasilicate 6834-92-0 / 229-912-9	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 in accordance with Regulation (EC) No. 648/2004 on detergents.

Readily biodegradable, according to appropriate OECD test.

OECD test guideline: 301 B (CO₂ Evolution Test)

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.

SAFETY DATA SHEET

Version number: 5.1
Issued: 2024-11-25
Replaces SDS: 2022-11-07

According to Regulation (EC) No 1907/2006



Active Green cleaner tab

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 within the meaning of Regulation (EC) No. 1005/2009 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.

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

1823

14.2. UN proper shipping name

ADR / RID / ADN proper shipping name

SODIUM HYDROXIDE, SOLID

IMDG proper shipping name

SODIUM HYDROXIDE, SOLID

SAFETY DATA SHEET

Version number: 5.1
Issued: 2024-11-25
Replaces SDS: 2022-11-07

According to Regulation (EC) No 1907/2006



Active Green cleaner tab

14.3. Transport hazard class(es)

Label

ADR/RID/ADN



8

ADR / RID Class

8

ADR / RID Classification code

C6

ADR / RID hazard identification number

80

IMDG Class

8

IATA Class

8

ADN Class

8

ADN Class Code

C6

14.4. Packing group

II

14.5. Environmental hazards

Environmental hazards

No

IMDG Marine Pollutant

No

14.6. Special precautions for user

IMDG EmS

F-A, S-B

14.7. Maritime transport in bulk according to IMO instruments

Not applicable.

SAFETY DATA SHEET

Version number: 5.1
Issued: 2024-11-25
Replaces SDS: 2022-11-07

According to Regulation (EC) No 1907/2006



Active Green cleaner tab

Other

Additional information ADR-RID

LQ: 1kg

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

EU regulations

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

Ingredients according to Annex VII: <5% polycarboxylates , 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.

SAFETY DATA SHEET

Version number: 5.1
Issued: 2024-11-25
Replaces SDS: 2022-11-07

According to Regulation (EC) No 1907/2006



Active Green cleaner tab

SECTION 16: Other information

Changes to previous revision

Addition iHexagon : SECTION 1.2

Addition PNC : SECTION 1.4

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

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

SAFETY DATA SHEET

Version number: 5.1
Issued: 2024-11-25
Replaces SDS: 2022-11-07

According to Regulation (EC) No 1907/2006



Active Green cleaner tab

Phrase meaning

Skin Corr. 1A - Skin corrosion, hazard category 1A

Eye Dam. 1 - Serious eye damage, hazard category 1

Met. Corr. 1 - Corrosive to metals, hazard category 1

Eye Irrit. 2 - Eye irritation, hazard category 2

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

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

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.

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.