

# Active Green cleaner cartridge

## Safety Data Sheet



according to the United Nations GHS (Rev. 9, 2021)  
Issue date: 11/29/2022 Revision date: 12/19/2024 Supersedes: 11/29/2022 Version: 1.1  
SDS No: 00625-0079

### SECTION 1: Identification

#### 1.1. GHS Product identifier

Product form : Mixture  
Product name : Active Green cleaner cartridge  
UN-No. (ADR) : 3262

#### 1.2. Other means of identification

Further information : Article number: 56.01.912

#### 1.3. Recommended use of the chemical and restrictions on use

Recommended use : RATIONAL Active Green cleaner cartridge for all iHexagon, iCombi Pro cooking systems with iCareSystem AutoDose for commercial use  
Alkaline cleaner for professional users

#### 1.4. Supplier's details

##### Supplier

RATIONAL AG  
Siegfried-Meister-Straße 1  
86899 Landsberg am Lech  
Germany  
T +49 8191 327 387 - F +49 8191 327 231

##### Supplier

RATIONAL International India Private Limited  
Barthi Worldmark 3, 6th floor  
Sector 65, Gurugram  
Haryana 122018  
India  
T +91 124 483 9333

E-mail address of competent person responsible for the SDS: sds@gbk-ingelheim.de

#### 1.5. Emergency phone number

Emergency number : Emergency CONTACT (24-Hour-Number): GBK GmbH +49 (0)6132-84463

### SECTION 2: Hazard identification

#### 2.1. Classification of the substance or mixture

##### Classification according to the United Nations GHS

Skin corrosion/irritation, Category 1 H314  
Serious eye damage/eye irritation, Category 1 H318  
Full text of H-statements: see section 16  
Adverse physicochemical, human health and environmental effects : Causes severe skin burns and eye damage, Causes serious eye damage.

#### 2.2. GHS Label elements, including precautionary statements

##### Labelling according to the United Nations GHS

Hazard pictograms (GHS UN) :



Signal word (GHS UN) : Danger  
Hazardous ingredients : Sodium hydroxide; disodium metasilicate  
Hazard statements (GHS UN) : H314 - Causes severe skin burns and eye damage  
Precautionary statements (GHS UN) : P101 - If medical advice is needed, have product container or label at hand.  
P280 - Wear eye protection, protective gloves.  
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 affected areas with water .  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

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contact lenses, if present and easy to do. Continue rinsing.  
P501 - Dispose of contents and container to a hazardous or special waste collection point.

### 2.3. Other hazards which do not result in classification

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to the United Nations GHS
Sodium hydroxide	CAS-No.: 1310-73-2	50 - 70	Met. Corr. 1, H290 Skin Corr. 1A, H314 Eye Dam. 1, H318
disodium metasilicate	CAS-No.: 6834-92-0	10 - 30	Met. Corr. 1, H290 Skin Corr. 1B, H314 STOT SE 3, H335

Full text of H-statements: see section 16

## SECTION 4: First-aid measures

### 4.1. Description of necessary first-aid measures

First-aid measures general	: Adhere to personal protective measures when giving first aid.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. If symptoms persist, consult a doctor.
First-aid measures after skin contact	: Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician immediately.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: Rinse mouth. Drink plenty of water. Do not induce vomiting. Call a physician immediately.

### 4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after skin contact	: Burns.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Burns. May perforate the oesophagus or the digestive tract.

### 4.3. Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically. If possible, show the doctor this safety data sheet. Failing this, show the doctor the packaging or label.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide (CO2). Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	: Do not use a solid water stream as it may scatter and spread fire.

### 5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire	: Toxic fumes may be released.
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### 5.3. Special protective actions for fire-fighters

- Firefighting instructions : Contain the extinguishing fluids by bunding. Do not allow run-off from fire fighting to enter drains or water courses.
- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

- Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe dust.

#### 6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

### 6.3. Methods and materials for containment and cleaning up

- Methods for cleaning up : Mechanically recover the product. Disposal must be done according to official regulations.
- Other information : Dispose of materials or solid residues at an authorized site.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe dust. Wear personal protective equipment.
- Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.
- Storage temperature : 10 – 40 °C

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Sodium hydroxide (1310-73-2)	
India - Occupational Exposure Limits	
Local name	Sodium hydroxide
PEL (OEL C)	2 mg/m <sup>3</sup>
Regulatory reference	Factories Act 1948 [Act No. 63 of 1948] As amended by the Factories (Amendment) Act, 1987. The second shedule "Permissible levels of certain chemical substances in work environment"

### 8.2. Appropriate engineering controls

- Appropriate engineering controls : Ensure good ventilation of the work station.
- Environmental exposure controls : Avoid release to the environment.

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### 8.3. Individual protection measures, such as personal protective equipment (PPE)

Hand protection : Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Chemically resistant protective gloves	Nitrile rubber (NBR), Butyl rubber	3 (> 60 minutes)			EN ISO 374

Skin and body protection : Not required for normal conditions of use

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment

### 8.4. Exposure limit values for the other components

No additional information available

## SECTION 9: Physical and chemical properties

### 9.1. Basic physical and chemical properties

Physical state	: Solid
Colour	: White.
Odour	: characteristic.
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not applicable
Boiling point	: Not available
Flammability	: Non flammable.
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not available
pH	: 12.8
pH solution concentration	: 1 %
Viscosity, kinematic	: Not applicable
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 1.75 g/cm <sup>3</sup>
Relative density	: Not available
Relative vapour density at 20°C	: Not applicable
Solubility	: Water: soluble in water
Particle size	: Not available

### 9.2. Data relevant with regard to physical hazard classes (supplemental)

Explosive limits	: Not applicable
VOC content	: < 3 %

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

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### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Keep out of frost. Protect from moisture. Keep away from heat and direct sunlight.

### 10.5. Incompatible materials

Strong acids. Light metals. Oxidizing agent.

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified (Based on available data, the classification criteria are not met)  
Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met)  
Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met)

#### disodium metasilicate (6834-92-0)

LD50 dermal rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: EPA OPPTS 870.1200 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 2.06 mg/l air Animal: rat, Guideline: EPA OPPTS 870.1300 (Acute inhalation toxicity)
Skin corrosion/irritation	: Causes severe skin burns. pH: 12.8
Serious eye damage/irritation	: Causes serious eye damage. pH: 12.8
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met)

#### disodium metasilicate (6834-92-0)

NOAEL (oral, rat, 90 days)	227 – 237 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.  
Hazardous to the aquatic environment, short-term (acute) : Not classified (Based on available data, the classification criteria are not met)  
Hazardous to the aquatic environment, long-term (chronic) : Not classified (Based on available data, the classification criteria are not met)

#### Sodium hydroxide (1310-73-2)

EC50 Daphnia 1	40.4 mg/l Test organisms (species): Ceriodaphnia sp.
<b>disodium metasilicate (6834-92-0)</b>	
LC50 fish 1	210 mg/l (96 h, Brachydanio rerio (zebra-fish))

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disodium metasilicate (6834-92-0)	
EC50 Daphnia 1	1700 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	207 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

### 12.2. Persistence and degradability

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Persistence and degradability	The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

### 12.3. Bioaccumulative potential

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Bioaccumulative potential	No additional information available

### 12.4. Mobility in soil

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Mobility in soil	No additional information available

### 12.5. Other adverse effects

Ozone	: Not classified (Based on available data, the classification criteria are not met)
Other adverse effects	: No additional information available
Other information	: Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer).

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions. Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Dirty containers cannot be handled as normal waste. Packaging that is not properly emptied must be disposed of as the unused product.

## SECTION 14: Transport information




In accordance with UN RTDG / IMDG / IATA

UN RTDG	IMDG	IATA
<b>14.1. UN number</b>		
3262	3262	3262
<b>14.2. UN Proper Shipping Name</b>		
CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (Sodium hydroxide ; disodium metasilicate)	CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (Sodium hydroxide ; disodium metasilicate)	Corrosive solid, basic, inorganic, n.o.s. (Sodium hydroxide ; disodium metasilicate)
<b>14.3. Transport hazard class(es)</b>		
8	8	8

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UN RTDG	IMDG	IATA
		
<b>14.4. Packing group</b>		
II	II	II
<b>14.5. Environmental hazards</b>		
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No
No supplementary information available		

### 14.6. Special precautions for user

#### UN RTDG

Special provisions (UN RTDG)	: 274
Limited quantities (UN RTDG)	: 1 kg
Excepted quantities (UN RTDG)	: E2
Packing instruction (UN RTDG)	: P002, IBC08
Special packing provisions (UN RTDG)	: B2, B4
Portable tank and bulk container special instructions (UN RTDG)	: T3
Portable tank and bulk container special provisions (UN RTDG)	: TP33

#### IMDG

Special provisions (IMDG)	: 274
Limited quantities (IMDG)	: 1 kg
Excepted quantities (IMDG)	: E2
Packing instructions (IMDG)	: P002
IBC packing instructions (IMDG)	: IBC08
IBC special provisions (IMDG)	: B21, B4
Tank instructions (IMDG)	: T3
Tank special provisions (IMDG)	: TP33
Stowage category (IMDG)	: B
Segregation (IMDG)	: SGG18, SG35

#### IATA

PCA Excepted quantities (IATA)	: E2
PCA Limited quantities (IATA)	: Y844
PCA limited quantity max net quantity (IATA)	: 5kg
PCA packing instructions (IATA)	: 859
PCA max net quantity (IATA)	: 15kg
CAO packing instructions (IATA)	: 863
CAO max net quantity (IATA)	: 50kg
Special provisions (IATA)	: A3, A803
ERG code (IATA)	: 8L

### 14.7. Transport in bulk according to IMO instruments

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations specific for the product in question

No additional information available

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### SECTION 16: Other information

Issue date : 11/29/2022  
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Supersedes : 11/29/2022

Section	Changed item	Comments
1		<b>Modified</b>

Other information : Data of sections 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities. 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.

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail

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Abbreviations and acronyms:	
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disruptor
DOT	Department of Transport
TDG	Transportation of Dangerous Goods
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
GHS	Globally Harmonized System of Classification, Labelling and Packaging of Chemicals
IBC-Code	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
MARPOL 73/78	MARPOL 73/78: International Convention for the Prevention of Pollution From Ships
ADG	Transport of Australian Dangerous Goods
Full text of H-statements:	
Met. Corr. 1	Corrosive to metals, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation
H290	May be corrosive to metals
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H335	May cause respiratory irritation

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should therefore not be construed as guaranteeing any specific property of the product.