

# Operating instructions

## SMARTPOWER™ RTU Dispenser

Dispenser for solid pre-rinse products with colour and shape coding



SMARTPOWER™ RTU (Ready to Use) Dispenser (UK Version)

MAN054128 Ver. 01-06.2024

10.06.2024

Read the instructions prior to performing any task!

**ENGLISH**

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# 1 General

## 1.1 Notes on the operating instructions



### CAUTION!

#### Read the instructions!

**Prior to commencing any works and/or operating, appliances or machinery, these instructions must be read and understood as a strict necessity. In addition, always heed all the instructions relating to the product that are included with the product!**

All instructions are also available for download if you have mislaid the original. Furthermore, you will always have the opportunity to get the latest version of the manuals. The German-language manual is the **original operating manual**, which is legally relevant. **All other languages are translations.**

#### Particular attention should be paid to the following:

- Personnel must have carefully read and understood all instructions belonging to the product before starting any work. The basic premise for safe operation is observing all safety instructions and work instructions in this manual.
- Figures in this manual are provided for basic understanding and may deviate from the actual product.
- All manuals and guides must be placed at the disposal of the operating and maintenance personnel at all times. Therefore, please store all manuals and guides as a reference for operation and service.
- If the system is resold, this manual must always be supplied with it.
- The relevant sections of this operating manual must be read, understood and noted before installing the system, using it for the first time, and before carrying out any maintenance or repair work.

### Available instructions

The latest and complete operating instructions are available online.




To download the instructions on a PC, tablet or smartphone, use the link below or scan the QR code.

**Download the operating instructions 'SMARTPOWER™ RTU Dispenser' (MAN054128):**

[https://www.ecolab-engineering.de/fileadmin/download/bedienungsanleitungen/institutional/Ware-Washing/MAN054128\\_SMARTPOWER\\_RTU\\_Dispenser\\_UK.pdf](https://www.ecolab-engineering.de/fileadmin/download/bedienungsanleitungen/institutional/Ware-Washing/MAN054128_SMARTPOWER_RTU_Dispenser_UK.pdf)

### Always call up the latest operating instructions

If any '*operating instructions*' are changed, the document will immediately be posted '*online*'. All operating instructions are provided in PDF format .

To open and display the operating instructions, we recommend that you use Adobe PDF Viewer( <https://acrobat.adobe.com> ).

### Accessing operating instructions using the website of Ecolab Engineering GmbH

You can search for and select the required instructions on the manufacturer's website ( <https://www.ecolab-engineering.de> ) under [Media Centre] / [Operating Instructions].




### Accessing operating instructions using the 'DocuAPP' for Windows®

You can use the 'DocuApp' for Windows® (as of Version 10) to download, read and print all published operating instructions, catalogues, certificates and CE declarations of conformity on a Windows® PC.




To install this program, open the 'Microsoft Store' and enter "**DocuAPP**" in the search field. <https://www.microsoft.com/store/productId/9N7SHKNHC8CK>. Follow the installation instructions.

### Accessing operating instructions using a smartphone/tablet




You can use the Ecolab 'DocuApp'  to access all operating manuals, catalogues, certificates and CE declarations of conformity published by Ecolab Engineering using a smartphone or tablet (Android  & iOS ). The published documents are always up to date and new versions are displayed immediately.




### 'Ecolab DocuApp' guide for download



For more information about 'DocuApp' , refer to the dedicated software description (art. no. MAN047590).  
**Download:** [https://www.ecolab-engineering.de/fileadmin/download/bedienungsanleitungen/dosiertechnik/Dosierpumpen/417102298\\_DocuAPP.pdf](https://www.ecolab-engineering.de/fileadmin/download/bedienungsanleitungen/dosiertechnik/Dosierpumpen/417102298_DocuAPP.pdf)




### Installing 'DocuApp' for Android

On Android  based smartphones, the 'DocuApp'  can be installed from the "Google Play Store" .

1. ➤ Call up the "Google Play Store"  with your Smartphone / Tablet.
2. ➤ Enter the name "Ecolab DocuAPP" in the search field.
3. ➤ Select the **Ecolab DocuAPP** .
4. ➤ Choose [Install].  
⇒ The 'DocuApp'  is installed.

### Installing the 'DocuApp' for iOS (Apple)

On iOS  based smartphones, the 'DocuApp'  can be installed from "App Store" .

1. ➤ Call up the "App Store"  on your iPhone/iPad.
2. ➤ Go to the search function.
3. ➤ Enter the name "Ecolab DocuAPP" in the search field.
4. ➤ Enter the search term **Ecolab DocuAPP**  to search for the app.
5. ➤ Choose [Install].  
⇒ The 'DocuApp'  is installed.

### Symbols, highlights and bulleted lists

Safety instructions in this manual are identified by symbols and introduced by signal words expressing the extent of the hazard.

**DANGER!**

Indicates an imminently hazardous situation which, if not avoided, could result in death or serious injury.

**WARNING!**

Indicates a potentially imminent danger that can lead to serious injuries or even death.

**CAUTION!**

Indicates a potentially hazardous situation which may result in minor or slight injury.

**NOTICE!**

Indicates a potentially dangerous situation that may result in property damage.

***Tips and recommendations***

*This symbol highlights useful tips, recommendations and information for an efficient and trouble-free operation.*

**ENVIRONMENT!**

Indicates potential hazards to the environment and identifies environmental protection measures.

**Safety instructions in the operating instructions**

Safety instructions can refer to specific, individual operating instructions. These safety instructions are embedded in the operating instructions, so they do not interrupt the reading flow when executing the action. The signal words described above are used.

**Example:**

1. ➤ Loosen screw.

2. ➤

**CAUTION!**



**Risk of trapping on the cover!**

Close the cover carefully.

3. ➤ Tighten screw.

## Other markings

The following markings are used in these instructions to provide emphasis:

- 1., 2., 3. ... Step-by-step operating instructions
-  Results of the operating steps
-  References to sections of these instructions and related documents
- Lists in no set order
- [Button] Controls (e.g. button, switch), indicators (e.g. signal lights)
- 'Display' Screen elements (e.g. buttons, assignment of function keys)



### **Item numbers and EBS numbers**

*Both item numbers and EBS numbers are shown in these operating instructions. EBS numbers are Ecolab-internal item numbers and are used within our corporate group.*

## Copyright

**This manual is copyright protected. All rights belong to the manufacturer.**

The transfer of this manual to third parties, reproductions in any kind and form, even in extracts, as well as the exploitation and/or communication of the content are not permitted without the written permission of Ecolab (hereinafter referred to as "manufacturer") except for internal purposes. Any violations result in obligatory compensation for damages. The manufacturer reserves the right to enforce additional claims.

## 1.2 Transportation

The unit is supplied in cardboard packaging. Please refer to the technical data for the packaging dimensions and packaging weight.

### Improper transportation



#### **NOTICE!**

#### **Material damage due to improper transport**

Transport units can fall or tip over if improperly transported. This can cause considerable damage.

- Observe symbols and instructions on the packaging
- Unload and transport the transport items carefully
- Only use intended attachment points
- Transport items to the place of use using a suitable means of transport or lifting equipment.
- Use only approved means of transport
- Do not remove packaging until immediately before installation

**DANGER!**

**Risks when commissioning equipment which has been damaged during transportation.**

Installation or start-up must not take place if any transport damage is detected when unpacking the system.

Installing/starting up a damaged pump may result in uncontrollable errors, which may lead to irreparable damage to personnel and/or of the equipment when using aggressive dosing agents.

**Transport inspection****NOTICE!**

Check the delivery for completeness and any transport damage.

**In case of visible transport damage, proceed as follows:**

- Do not accept the delivery or accept it only on a provisional basis.
- Note down the extent of damage on the transport documents or on the carrier's delivery slip.
- Lodge a complaint.



***Claim for any damage as soon as you notice it!***

*Damage claims can be filed only within the applicable period for complaints.*

**1.3 Packaging**

The individual packages are bundled to suit the expected transport conditions. Only environmentally-friendly materials have been used in the packaging. The packaging is designed to protect the individual components against shipping damage, corrosion and other damage before assembly. Do not destroy the packaging and only remove it just before assembly.



*There may be instructions on how to handle the packages (e.g. this way up, fragile, keep dry). These must be adhered to accordingly.*

**ENVIRONMENT!**

**Risk of environmental damage from incorrect disposal!**

Packaging materials are valuable raw materials and can, in many cases, be used again or be usefully processed and recycled.

**Incorrect disposal of packaging materials can be a threat to the environment.**

- Observe the local disposal regulations!
- Environmentally-friendly disposal of packaging materials.
- If necessary, hire a specialist to carry out disposal.



## 1.4 Storage



*In certain cases, storage instructions may be specified on the packages that go beyond the requirements specified here. These must be observed accordingly.*

- Do not store outdoors.
- Store in a dry and dust-free place.
- Do not use abrasive solutions.
- Keep away from direct sunlight.
- Avoid mechanical vibrations.
- If stored for longer than 3 months, regularly check the condition of all parts and packaging. If necessary, renew or replace the packaging.
- Store away from frost.
- For more information, please see ↗ 10 Technical data



### **NOTICE!**

#### **Intermediate storage**

- The packaging is designed for a storage period of 3 months.
- If the dispenser is not operational for a period of longer than one week: fully empty and flush tank with water.



### **CAUTION!**

#### **Risk of damage to the dispenser.**

Ingress of dirt and water can damage the dispenser. Never clean the unit with a steam cleaner or with a water jet.

## 1.5 Equipment marking – identification plate



*Information on equipment marking and information on the rating plate can be found in chapter ↗ Chapter 10 'Technical data' on page 50 . The correct specification of the name and type is important for all queries. This is the only way of ensuring fast and accurate processing of your enquiry.*

## 1.6 Warranty

The manufacturer provides a warranty for operational safety, reliability and performance under the following conditions only:

- Assembly, connection, adjustment, maintenance and repairs must be carried out by qualified and authorised specialist personnel in compliance with all documents supplied.
- Please follow the instructions for use in the User Manual.
- Only original equipment spare parts are to be used for repairs.
- If metering media have been named for use in this manual, we explicitly exclude warranty / liability if other products are used!



*Our products are built, tested and certified in accordance with current standards/guidelines. They left the factory in a safe, faultless condition.*

*To maintain this condition and to ensure a trouble-free operation, the user must observe all instructions, warnings, maintenance regulations, etc. that are contained in all the corresponding manuals and that may be attached to the product.*

***The manufacturer's general warranty and service conditions apply.***

## 1.7 Repairs/returns to Ecolab Engineering GmbH



### **DANGER!**

#### **Conditions for returns**

**Before being returned, all parts must be completely free of all chemicals! We would point out that only clean, rinsed parts that are free of all chemicals can be accepted by our service!**

This is the only way of excluding the possibility of the risk of injury to our staff due to residues of chemical products. The goods sent in must, where possible, also be packed in a suitable bag preventing any leakage of liquid residues into the surrounding packaging. Enclose a copy of the product data sheet for the chemical used so that our Service staff can be prepared to use the necessary personal protective equipment (PPE).



#### ***The return must be requested online***

***<https://www.ecolab-engineering.de/de/kontakt/ruecksendungen/>***

***Fill in all details and follow the further navigation.***

***You will receive the completed return form by email.***

## **Packaging and shipping**

If possible, use the original box to return the device.



*Ecolab assumes no liability for transport damage.*

1. ➤ Print and sign the return form.
2. ➤ Pack the product to be returned without any accessories, unless they may be related to the error.



*Make sure that the original serial number label is present on all products that are returned.*

3. ➤ Enclose the following documents with the consignment:

- Signed return form
- Copy of the order confirmation or delivery note
- In the case of a warranty claim: Invoice copy with date of purchase
- Safety data sheet for hazardous chemicals



*The return form must be affixed in a clearly visible position **on the outside** of the package using a delivery note bag.*

4. ➤ Copy the return address with return number to the shipping label.

## **1.8 Contact**

### **Manufacturer**



#### **Ecolab Engineering GmbH**

Raiffeisenstrasse 7

**D-83313 Siegsdorf**

Telephone (+49) 86 62 / 61 0

Fax (+49) 86 62 / 61 166

[engineering-mailbox@ecolab.com](mailto:engineering-mailbox@ecolab.com)

<http://www.ecolab-engineering.com>

**Before contacting the manufacturer, we always recommend that you contact your sales partner in the first instance.**

## 2 Safety

### 2.1 General safety advice



#### **DANGER!**

If you believe that the unit can no longer be operated safely, you must decommission it immediately and secure it so that it cannot be used inadvertently.

#### **This applies:**

- if the unit shows visible signs of damage,
- if the unit no longer appears to be operational,
- after prolonged periods of storage under unfavourable conditions.

#### **The following instructions must always be observed:**

- Prior to carrying out any work on electric parts, switch off the power supply and secure the system against being switched back on again.
- Safety regulations and prescribed protective clothing when handling chemicals should be followed.
- Attention must be paid to the information included on the product data sheet of the metering medium used.
- The unit must only be operated with the supply and control voltage specified in the Technical Data section.

### 2.2 Intended use

The SMARTPOWER™ RTU Dispenser dispenser delivers a detergent or pre-rinse solution from Ecolab's compressed detergent capsules (SMARTPOWER™).

The following models of the dispenser are available:

SMARTPOWER™ Manual Dispenser RTU	- Delivers a detergent solution for manual dishwashing
SMARTPOWER™ Presoak Dispenser RTU	- Delivers a pre-rinse solution for manually pre-rinsing dishes and cutlery
SMARTPOWER™ Pot&Pan Soak Dispenser RTU	- Delivers a pre-rinse solution for manually pre-rinsing pots and pans

The following points are included under intended use:

- Only approved compressed products may be dispensed.
- Use is restricted to commercial applications; private use is excluded.
- All operating instructions and operating instructions prescribed by Ecolab and all maintenance and servicing conditions must be complied with.
- The metering unit must be operated only within the operating conditions permitted in accordance with ↪ *Chapter 10 'Technical data' on page 50*.

Any other or additional use is considered improper. Ecolab shall not be liable for any resulting damage to property or for personal injury.

### **Reasonably foreseeable incorrect use**

According to the hazard analysis, the following points can lead to misuse:

- Operation with an open cover or without a cover.
- Using the metering unit as a storage location for objects or tools.
- Non-compatible accessories.
- Line cross-sections that are too small.
- Incorrect ambient temperatures or media temperatures.
- Operation in potentially explosive areas.
- Use of unsuitable metering media.

### **Unauthorised modifications and spare parts**



#### **CAUTION!**

Changes or modifications are not permitted without prior, written permission from Ecolab Engineering GmbH and shall result in the forfeiting of any and all warranty entitlements. Original spare parts and accessories approved by the manufacturer are designed to increase safety.

The use of other parts excludes the warranty for the resulting consequences.

**Note that CE conformity expires if subsequent modifications are made.**

## **2.3 Service life**

If maintenance is conducted properly (visual inspection, functional testing, replacement of parts, etc.), the life span of the Komponente is approximately 10 years.

Afterwards, a revision or a general overhaul may need to be done the manufacturer.

🔗 'Manufacturer' on page 11

## **2.4 Safety measures taken by the operator**



#### **NOTICE!**

It is expressly up to the operator to train, monitor and instruct its operating and maintenance personnel so that they comply with all of the necessary safety measures.

**The frequency of inspections and controls must be complied with and documented.**



#### **WARNING!**

##### **Danger due to improperly installed system components**

Improperly installed system components can result in personal injury and damage to the system.

- Check that the system components provided (pipe joints, flanges) have been installed correctly.
- If assembly has not been performed by Customer Service or another authorised party, check that all system components are made of the correct materials and meet the requirements.

## Obligations of the operator



### Valid guidelines

*In the EEA (European Economic Area), national implementation of the Directive (89/391/EEC) and corresponding individual directives, in particular the Directive (2009/104/EC) concerning the minimum safety and health requirements for the use of work equipment by workers at work, as amended, are to be observed and adhered to. If you are outside the EEA, the local regulations always apply. However, it is important to make sure that the EEA rules do not apply to your area, due to special agreements. **The operator is responsible for checking the terms and conditions that affect you.***

### The operator must adhere to the local legal provisions for:

- The safety of personnel (within the Federal Republic of Germany, in particular the federal law and accident prevention regulations, workplace guidelines, e.g. operating instructions, also according to Section 20 Hazardous Substances Ordinance (GefStoffV), personal protective equipment (PPE), preventive investigations)
- The safety of work materials and tools (protective equipment, work instructions, procedural risks and maintenance)
- Product procurement (safety datasheets, list of hazardous substances)
- Disposal of products (Waste Act)
- Disposal of materials (decommissioning, Waste Act)
- Cleaning (detergents and disposal)
- and observe current environment protection regulations.

### The owner is also required to:

- Provide personal protective equipment (PPE)
- Incorporate the measures into operating instructions and to instruct personnel accordingly
- For operating sites (from 1m above ground) To provide safe access
- The operator must provide lighting in workplaces in accordance with DIN EN 12464-1 (within the Federal Republic of Germany). Observe the local applicable regulations!
- To ensure that local regulations are complied with during installation and commissioning, if these procedures are conducted by the operator

## 2.5 Personnel requirements

### Qualifications



### DANGER!

**Risk of injury if personnel are inadequately qualified!**

**If unqualified personnel carry out work or are in the danger area, dangers may arise which can lead to serious injuries and considerable damage to property.**

All the activities may only be performed by personnel that is qualified and suitably trained for this purpose.

**Keep unqualified personnel away from hazard areas.**

**NOTICE!****Incorrect operation by unreliable personnel**

Material damage due to incorrect operation.

Only persons who can be expected to carry out their work reliably can be approved as personnel. Individuals whose reactions are impaired, e.g. by drugs, alcohol, medicines, are not authorised.

- When selecting personnel, observe the valid age and occupation-specific regulations.
- Unauthorised persons must be kept away from the Komponente.

**Obligations on the part of personnel****The personnel must:**

- follow the applicable national laws and regulations, as well as the operator's regulations on occupational safety
- read and follow the instructions in this document before starting work
- not enter areas secured using protective measures or access restrictions without due authorisation
- in the event of faults that could jeopardise the safety of personnel or components, immediately switch off the Plant and report the fault to the responsible department or person
- wear the personal protective equipment (PPE) prescribed by the operator
- observe the applicable safety regulations and the manufacturer's safety data sheet when handling chemicals

**Operator**

The operator has been instructed about the tasks assigned to him and possible dangers in case of improper behaviour. He may only carry out tasks that go beyond operation during normal operation if this is specified in these instructions or the owner has expressly authorised the operator to do so.

**Qualified employee**

A person with appropriate training, appropriate education and experience who is able to identify risks and avoid hazards.

**Service Personnel**

Certain work may only be carried out by the manufacturer's service personnel or by service personnel authorised or specially trained by the manufacturer. If you have any questions, contact the ☎ *'Manufacturer' on page 11*.

**Service personnel**

Certain work may only be carried out by service personnel of the manufacturer or by service personnel authorised or specially trained by the manufacturer. If you have any questions, please contact ☎ *Manufacturer*.

**Specialist**

A person with appropriate training, schooling and experience enabling him or her to identify risks and avert danger.

**Trained personnel**

Someone who has been instructed by a professional in their designated task and informed of the possible dangers of improper behaviour and, if applicable, has been informed of the necessary protective devices and measures.

**DANGER!****Auxiliary personnel without special qualifications**

Auxiliary personnel without special qualifications or without special training who do not meet the requirements described here are unaware of the dangers in the work area.

**Therefore, there is a risk of injury to auxiliary personnel.**

It is imperative that auxiliary personnel without specialist knowledge are familiarised with the use of personal protective equipment (PPE) for the activities to be performed, or are appropriately trained, and that these measures are monitored. These personnel may then only be deployed on activities for which intensive training has been given beforehand.

**DANGER!****Unauthorised personnel**

Unauthorised persons who do not meet the requirements described here are not familiar with the risks in the operating area.

Therefore unauthorised persons are at risk of injury.

**Working with unauthorised persons:**

- All work must be suspended for as long as unauthorised persons are present in hazardous or working areas.
- If in doubt as to whether a person is authorised to be in hazardous and operating area, approach said person and lead them out of this area.
- General information: Keep unauthorised persons away!

## 2.6 Personal protection equipment (PPE)

**DANGER!**

Personal protective equipment, hereinafter referred to as PPE, is used to protect personnel. It is imperative to pay attention to the PPE described in the product data sheet (safety data sheet) for the metered medium.

**Chemical resistant protective gloves**

Chemical-resistant protective gloves are used to protect the hands against aggressive chemicals.

**Protective eyewear**

Protective eyewear protects the eyes against flying parts and liquid splashes.

**Protective gloves**

Protective gloves are used to protect the hands against friction, abrasions, cuts or deeper injuries as well as when touching hot surfaces.





### Safety shoes

Safety shoes protect feet against crushing, falling parts, sliding on slippery surfaces and against aggressive chemicals.

## 2.7 General information about risks

### Unauthorised access



#### DANGER!

#### Unauthorised access

The owner must ensure that unauthorised personnel are prevented from accessing the operating area.

### Hazard arising from automatic start-up



#### DANGER!

Automatic start-up poses a hazard in areas marked with the symbol opposite. An automatic start-up can be initiated as soon as the power supply is connected with no need to press a switch/button beforehand.

### Risk of slipping



#### DANGER!

Risks of slipping are to be identified using the adjacent symbol. Spilled chemicals are a slipping hazard in wet conditions.



#### WARNING!

#### Risk of slipping due to fluid in the operation and provisioning area!

- Wear non-slip, chemically resistant shoes when working.
- Place product containers in a tank to prevent a slipping hazard caused by leaking fluids.



#### ENVIRONMENT!

Leaked, spilled metering media must be cleaned and disposed of correctly, according to the instructions on the safety data sheet. It is essential to ensure that the required personal protective equipment (PPE) is used.

### Risk of fire



#### DANGER!

#### Risk of fire

If there is a risk of fire, it is imperative to use the designated extinguishing agent and to implement suitable safety measures to tackle the fire. It is also imperative here to comply with the safety data sheet for the chemicals you use to tackle the fire!

**Chemical hazards (metering medium/active substance)**



**WARNING!**

**Burns caused by harmful chemicals**

Leaks on the Komponente can allow corrosive chemicals to escape and cause serious injury.

- Read the enclosed safety data sheet carefully before using chemicals.
- The safety regulations and the required protective clothing for working with chemicals must be complied with.
- Safety devices such as showers and eye flushing must be accessible and checked regularly to ensure that they are fully functional.
- Ensure adequate ventilation and extraction.
- Avoid skin and eye contact.
- Check the Komponente regularly for tightness.
- Do not put the Komponente into operation if leaks occur.
- If leaks are identified, trigger the emergency stop function immediately.
- Do not operate the Komponente again until the leaks have been repaired.



**DANGER!**

**Spilled chemicals can pose a biological hazard.**

Be careful not to spill chemicals or allow them to leak; otherwise, a biological hazard cannot be ruled out. Make sure that suitable binding agents are provided at the filling point according to the safety data sheet for the metering chemicals.



**DANGER!**

**Risk of injury to the skin and eyes caused by the chemical used (metering medium).**

- Read the enclosed safety data sheet carefully before using the metering medium.
- The safety regulations and the required protective clothing when working with chemicals must be complied with.
- Attention must be paid to the information included on the product data sheet for the metering medium used.



**DANGER!**

Hands must be washed before breaks and at the end of the working day. Information about the usual precautions when handling chemicals and about the use of PPE can be found on the relevant safety data sheet for the chemical being used and must be complied with.

**ENVIRONMENT!**

**Metering medium that leaks or spills may be harmful to the environment.**

Leaks or spills of a metering medium must be cleaned up and disposed of correctly in accordance with the instructions on the safety data sheet. It is imperative to use the prescribed PPE.

**Preventive action:**

Place product containers in a tray to collect leaking fluids without harming the environment.

## 2.8 Metering media

**CAUTION!**

**Use of metering media:**

- The Komponente may be used only with products validated by Ecolab. **We dont accept liability if products that havent been validated are used.**
- The metering media are procured by the operator.
- The owner will bear sole responsibility for correct handling and the associated risks.
- The hazard warnings and disposal instructions are provided by the operator.
- Wear suitable protective clothing (see safety data sheet).
- All safety regulations must be followed and the information contained in the safety data sheet/product data sheet must be observed.

**WARNING!**

**Injuries from uncontrolled chemical spills**

Uncontrolled chemical spills can cause serious injuries. Use the personal protective equipment (PPE) specified in the safety data sheet for the chemical products.

## Safety when handling chemicals



### NOTICE!

#### **Risk of accident and environmental damage when chemical residues are mixed together**

There is a risk of burns if residual stocks are mixed together and environmental damage if chemicals are leaking. For operational reasons, residues remain in the chemical supply containers. These are completely normal and designed to be kept to a minimum.

To avoid accidents caused by burns to operating personnel and damage to the environment caused by leaking chemicals, no residual stocks may be mixed together.



### CAUTION!

#### **Danger due to mixing of different chemicals**

Different chemicals may never be mixed with each other, unless this is exactly the purpose of the Komponente! In this case, it must be checked first which chemicals may be mixed in which ratio.

Mixing may only be carried out by trained specialist personnel.

**When changing containers, it is essential to ensure that only the same chemicals are exchanged.**

## Safety data sheets

The safety data sheet is intended to be consulted by users and enables them to take any steps necessary to safeguard their health and safety at work.



### DANGER!

Safety data sheets are always provided together with the supplied chemicals. Before using the chemicals, the safety data sheets must be read and understood, and all requirements must be implemented on site. Ideally, they should be displayed close to the workplace or to the supply containers so that the appropriate measures can be taken quickly in the event of an accident. The operator must provide the necessary protective equipment (PPE), as well as the described emergency equipment (eye bottle, etc.). Persons entrusted with operating the equipment must be instructed accordingly and trained.

## Download of safety data sheets



The latest safety data sheets are available online.  
To download them, go to the following link or scan the QR code.  
Then you can enter your required product and download the associated safety data sheet.  
<https://www.ecolab.com/sds-search>

## 2.9 Installation, maintenance and repair work

**NOTICE!****Material damage by using incorrect tools!**

Material damage may arise by using incorrect tools. **Use the correct tools.**

**DANGER!****Damage and injuries may occur if installation, maintenance or repair work is carried out incorrectly.**




All installation, maintenance and repair work must only be performed by authorised and trained specialist personnel in accordance with the applicable local regulations. Safety regulations and prescribed protective clothing when handling chemicals should be followed. Attention must be paid to the information included on the product data sheet for the metering medium used. Prior to all work the feeding of the metering medium should be disconnected and the system cleaned.

**NOTICE!**

**Only original equipment spare parts may be used for maintenance and repairs.**

## 3 Delivery

Part	Part name	Part no.	EBS no.
	<b>SMARTPOWER™ Manual Dispenser RTU</b>	178041	92231111
or			
	<b>SMARTPOWER™ Presoak Dispenser RTU</b>	178040	92231112
or			
	<b>SMARTPOWER™ Pot&amp;Pan Soak Dispenser RTU</b>	178042	92231144
	1 x quick-mounting plate	92232209	10033406
	SWIVEL OUTLET 150mm MSV	415505002	On request

Part	Part name	Part no.	EBS no.
	4 x PAN PLATE SCREW 4.8X45 DIN7981 SS	413059064	10005489
	4 x WASHER 6.4X12X1.6 DIN125 SS	413500361	10000603
	4 x ALL-PURPOSE SPRING SPIRAL DOWEL TFS 6/35	417200041	10009539
	SMARTPOWER™ Safety instructions		

## 4 Set-up / Functional description



The SMARTPOWER™ Manual Dispenser RTU, - Presoak Dispenser RTU and - Pot&Pan Soak Dispenser RTU are almost identical in their design. This operating manual uses the SMARTPOWER™ Pot&Pan Soak Dispenser RTU as an example. Differences in design are indicated where relevant in the operating instructions.

### Design SMARTPOWER™ RTU Dispenser

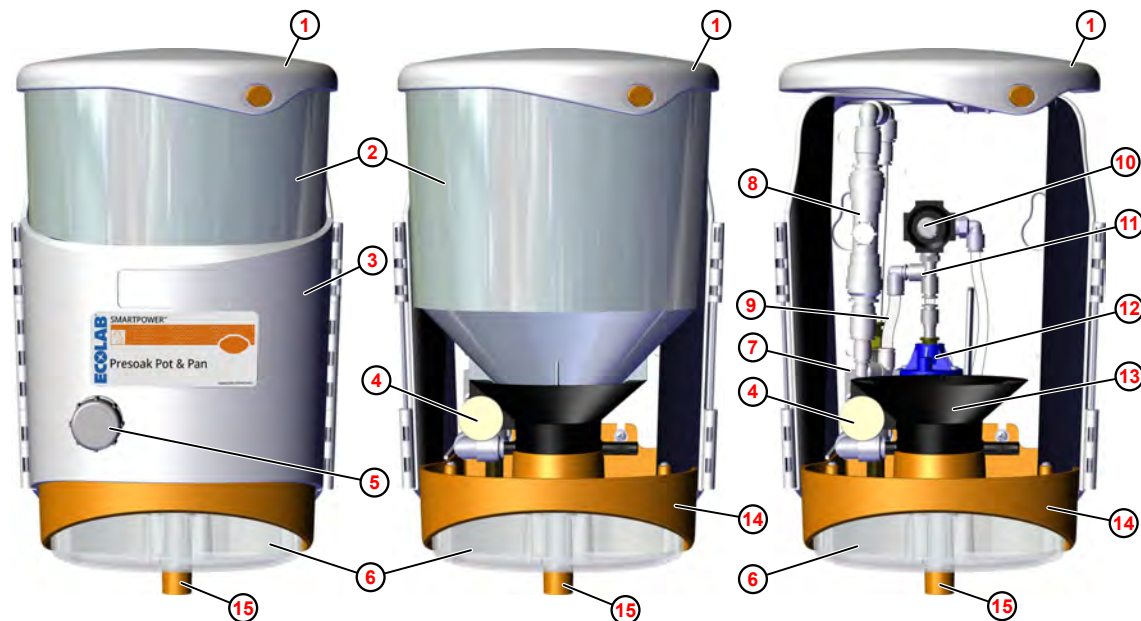


Fig. 1: Design

- |                                      |                           |
|--------------------------------------|---------------------------|
| ① Hinged cover                       | ⑨ Clean water supply line |
| ② Product cylinder with sieve insert | ⑩ Pressure regulator      |
| ③ Front hatch                        | ⑪ T-piece                 |
| ④ Button for fresh water valve       | ⑫ Flow limiter            |
| ⑤ Release button                     | ⑬ Water distributor       |
| ⑥ Bottom cover                       | ⑭ Base                    |
| ⑦ Clean water valve                  | ⑮ Product outlet          |
| ⑧ Double check valve                 |                           |

### Function description

The SMARTPOWER™ RTU Dispenser is an automatic dispenser for Ecolab's compressed capsule products (SMARTPOWER™). It essentially consists of a base ( Fig. 1 , ⑭ ) and a product cylinder with product feed ② to accommodate the compressed detergent capsule.

Through a manually operated water valve ⑦ , the clean water flows through the double check valve ⑧ to the T-piece ⑪ . From here, some of the clean water is led through the pressure regulator ⑩ to a spray nozzle in the water distributor ⑬ . This fresh water is sprayed against the detergent capsule from below and dissolves concentrate from the capsule.



The rest (bypass water) is led through the flow restrictor ⑫ to the water distributor ⑬, where it mixes with the detergent concentrate dissolved from the capsule. The ready-to-use solution is discharged into the sink through the product outlet ⑮ and a swivel outlet. No additional water needs to be added.

After opening the front flap ③ and removing the product cylinder ②, all parts are freely accessible for assembly, maintenance and repair.

## 5 Assembly and connection



### **DANGER!**

**Damage and injuries may occur if installation, maintenance or repair work is carried out incorrectly.**

- All installation, maintenance and repair work may only be performed by authorised and trained experts in accordance with valid local regulations.
- The safety regulations and the required protective clothing when working with chemicals must be complied with. Attention must be paid to the information included on the product data sheet for the metering medium used.
- The metering medium supply must be isolated and the system cleaned prior to installation, maintenance and repair work.



### **CAUTION!**

#### **Use personal protective equipment (PPE)**

Observe the safety regulations and wear the required protective clothing when working with chemicals. Attention must be paid to all information included on the product data sheet for the metering medium used.



### **NOTICE!**

#### **Damage to property due to unsuitable tools**

Use of unsuitable tools can cause damage to the Komponente.

- Use only the correct tools!
- Keep tools clean and in perfect condition; replace damaged tools!

### 5.1 Installation

#### **Installation site**

The SMARTPOWER™ RTU Dispenser is mounted immediately above a basin.

When determining the installation site, make sure the specifications of the unit are adhered to. The unit must not be exposed to strong shocks or constant vibrations.

Direct heat, especially direct sunlight, will heat up the unit inside the housing and can damage the unit. Make sure the unit is not exposed to direct sunlight.



*Before installation, make sure the supply lines are properly connected.  
↪ Chapter 10 'Technical data' on page 50 .*

#### **Wall condition**

When mounting the Komponente on a wall, it must be ensured that the wall can support the weight on a permanent basis (see ↪ Chapter 10 'Technical data' on page 50 ).

#### **Climatic conditions**

The ambient temperature and relative humidity at the installation site must correspond to the technical data. ↪ Chapter 10 'Technical data' on page 50

### Installation position

The unit should be wall-mounted upright.

### Space required

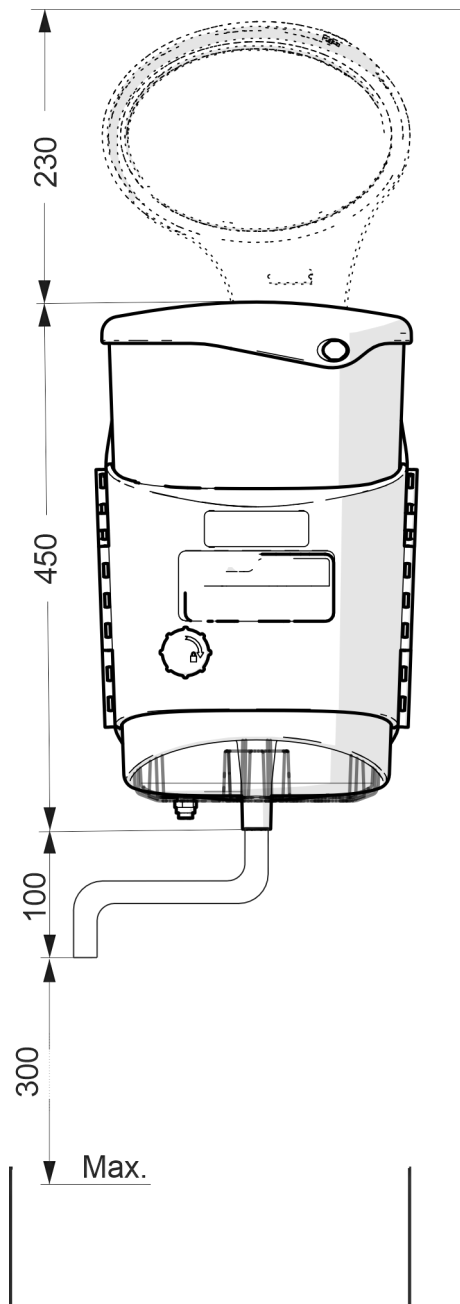


Fig. 2: Space required

To be able to open the hinged cover and insert the product, leave a clearance of at least 23 cm directly above the SMARTPOWER™ RTU Dispenser. Leave a clearance of 10 cm below the SMARTPOWER™ RTU Dispenser so the ready-to-use solution can drain through the swivel outlet.



#### **Legal requirements for the United Kingdom of Great Britain and Northern Ireland**

The spout of the swivel outlet must be at least 30 cm above the max. fill level of the container.

## Wall-mounting

- Personnel:
- Service Personnel
  - Qualified employee
- Protective equipment:
- Protective gloves
  - Safety shoes
  - Protective eyewear
- Tool:
- Drill
  - Spirit level

## Requirements:

- The suitability of the wall for wall mounting has been tested.
- The necessary supply connections are available.
- The installation location is suitable for the operation of the unit.

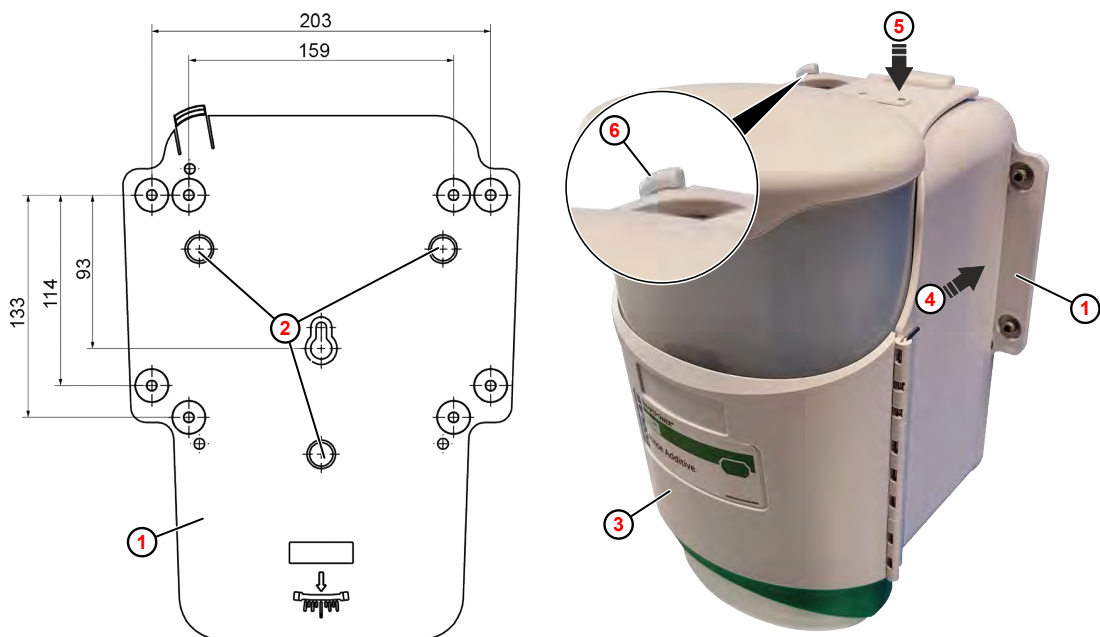


Fig. 3: Mounting the unit (with the rinse dispenser as an example)

1. Select the final location of the SMARTPOWER™ RTU Dispenser and drill holes in accordance with the Fig. 3 .
2. Drill the fixing holes and place the  $\varnothing$  6 mm dowels.
3. Attach the mounting plate ① with dowel screws.
4. SMARTPOWER™ RTU Dispenser ③ ② Put ④ the on the retaining pins.
5. SMARTPOWER™ RTU Dispenser Press the down ⑤ until the locking tab ⑥ on the top of the unit clicks into place.

## 5.2 Hydraulic installation

### Connecting the internal water supply

- |                       |  |
|-----------------------|--|
| Personnel:            | ■ Service Personnel                                  |
|                       | ■ Qualified employee                                 |
| Protective equipment: | ■ Protective gloves                                  |
|                       | ■ Safety shoes                                       |
|                       | ■ Protective eyewear                                 |
| Material:             | ■ Plastic tube with 3/8-inch outer diameter          |
|                       | ■ Shut-off valve T-piece 15mm x 15mm x 3/8-inch pipe |
|                       | ■ Adapter 3/8-thread x 3/8-inch tube                 |

Connect the appliance to the hot water supply as described below.


### Requirements

- The unit is mounted in accordance with the regulations.
- The water supply line is shut off.



#### **CAUTION!**

#### **Damage to the unit if the permissible water pressure is exceeded**

- Always observe the max. permissible water pressures and temperatures (see  *Section Technical data on page 50* ).  
If necessary, fit a pressure reducer and/or mixing valve upstream.
- The connection for the water supply (feed line) must be located behind a shut-off cock (angle valve).

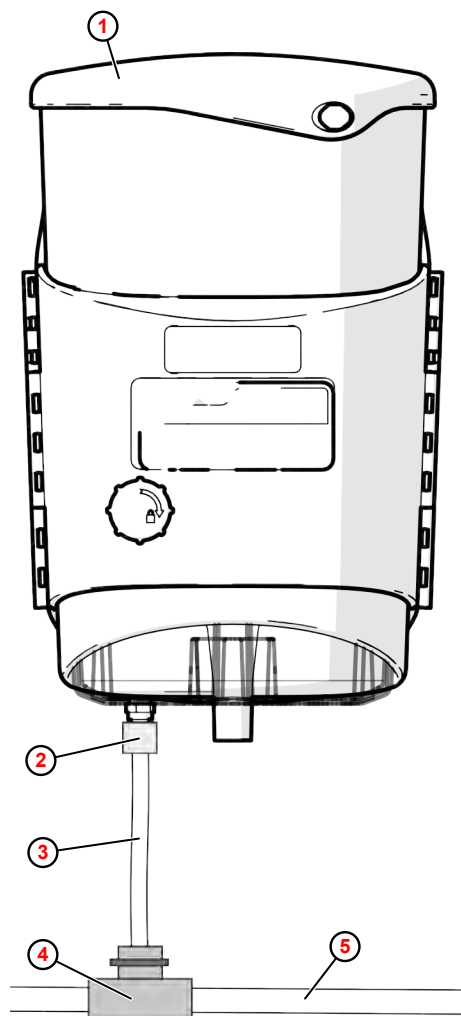


Fig. 4: RTU UK water connection

1. ➤ Connect an adapter of 3/8-thread x 3/8-inch pipe (2) to the water supply connection of the SMARTPOWER™ RTU Dispenser (1) .
2. ➤ Disconnect the water supply line (5) and install a compatible shut-off valve T-piece (4) .
3. ➤ Guide the water connection pipe (3) to the SMARTPOWER™ RTU Dispenser and connect to the adapter.



*The components (2) - (4) are not included with the unit and must be sourced locally.*

**Install the swivel outlet**

- Personnel:
- Service Personnel
  - Qualified employee
- Protective equipment:
- Protective gloves
  - Safety shoes
  - Protective eyewear
- Material:
- Petroleum jelly

**Requirements**

- The unit is mounted in accordance with the regulations.


**Legal requirements for the United Kingdom of Great Britain and Northern Ireland**

*The spout of the swivel outlet must be at least 30 cm above the max. fill level of the container.*



*Fig. 5: Install the swivel outlet*

- 1.** ➤ Remove the protective cap (2) and grease the o-rings with petroleum jelly.
- 2.** ➤ Insert the swivel outlet (4) into the product outlet (1) and tighten the union nut (3) by hand.

3. 



**NOTICE!**

Solid product residue in the cleaner solution could clog the aerator and cause the SMARTPOWER™ RTU Dispenser to overflow.

Unscrew the aerator  and discard.



## **6 Commissioning / operation**

### **6.1 Initial start-up**

- Personnel: ■ Service Personnel
- Protective equipment: ■ Protective gloves  
■ Safety shoes  
■ Protective eyewear

#### **Requirements:**

- The SMARTPOWER™ RTU Dispenser is correctly assembled and installed.  
↳ Chapter 5 'Assembly and connection' on page 26

1. ➤ Open shut-off valve on water supply pipe.
2. ➤ Check that all hoses, connections and components are tight.
3. ➤ In the SMARTPOWER™ RTU Dispenser, insert a suitable SMARTPOWER™ detergent capsule.



*Make sure the labels on the product and the dispenser match.  
The colour and shape of the detergent capsule correspond to the product symbol on the hinged cover.*

4. ➤ Close the sink drain.



*Fig. 6: Remove product*

5. ➤ Press the release button ①.



*If more cleaning solution is required, the release button can be locked in place by pressing and turning to the right ②.*

### 6.2 Removing the detergent solution

- Personnel: ■ Operator
- Protective equipment: ■ Protective eyewear  
■ Chemical resistant protective gloves

#### Requirements:

- Shut-off valve on the water inlet pipe is open.



Fig. 7: Remove product

1. ➤ Close the sink drain.
2. ➤ Press the release button ① .



*If more cleaning solution is required, the release button can be locked in place by pressing and turning to the right ② .*

### 6.3 Inserting the detergent capsule

Once the detergent capsule is used up, the concentration of the cleaning solution decreases and the pre-rinse or hand wash results deteriorate. In this case, use a new detergent capsule.

- |                       |                                 |
|-----------------------|---------------------------------|
| Personnel:            | ■ Operator                      |
| Protective equipment: | ■ Protective gloves             |
|                       | ■ Safety shoes                  |
|                       | ■ Protective eyewear            |
| Material:             | ■ SMARTPOWER™ detergent capsule |



*Make sure the labels on the product and the dispenser match. The colour and shape of the detergent capsule correspond to the product symbol ④ on the hinged cover.*



Fig. 8: Inserting the detergent capsule

1. ➤ Open the hinged cover ① .
2. ➤ Check the product cylinder ② for foreign bodies and dirt and clean if necessary.
3. ➤ Remove the detergent capsule ③ from the cellophane packaging.
4. ➤ Insert the detergent capsule into the product cylinder.
5. ➤ Close the hinged lid.

## 7 Servicing and maintenance



### **NOTICE!**

#### **Material damage by using incorrect tools!**

Material damage may arise by using incorrect tools. **Use the correct tools.**



### **DANGER!**

If you believe that the unit can no longer be operated safely, you must decommission it immediately and secure it so that it cannot be used inadvertently.

#### **This applies:**

- if the unit shows visible signs of damage,
- if the unit no longer appears to be operational,
- after prolonged periods of storage under unfavourable conditions.

#### **The following instructions must always be observed:**

- Prior to carrying out any work on electric parts, switch off the power supply and secure the system against being switched back on again.
- Safety regulations and prescribed protective clothing when handling chemicals should be followed.
- Attention must be paid to the information included on the product data sheet of the metering medium used.
- The unit must only be operated with the supply and control voltage specified in the Technical Data section.



### **CAUTION!**

Changes or modifications are not permitted without prior, written permission from Ecolab Engineering GmbH and result in the forfeiting of any and all warranty entitlements. Original spare parts and accessories approved by the manufacturer heighten the degree of safety.

The use of other parts results in an exclusion of the warranty for any ensuing consequences.

**Please consider that the CE conformity expires in case of subsequent conversions**


**DANGER!**

**Damage and injuries may occur if installation, maintenance or repair work is carried out incorrectly.**

All installation, maintenance and repair work must only be performed by authorised and trained specialist personnel in accordance with the applicable local regulations. Safety regulations and prescribed protective clothing when handling chemicals should be followed. Attention must be paid to the information included on the product data sheet for the metering medium used. Prior to all work the feeding of the metering medium should be disconnected and the system cleaned.


**NOTICE!**

**Only original equipment spare parts may be used for maintenance and repairs.**


**CAUTION!**

Before maintenance work, the water supply must be stopped and the inlet pipe slackened by operating the dispenser. Always observe the safety guidelines.

🔗 *Chapter 2 'Safety' on page 12*

The maintenance interval is a max. 1 year; we recommend every 6 months.

## 7.1 Maintenance intervals

Interval	Maintenance work	Personnel
As required	<b>General status:</b> External dirt: Check the unit is clean and clean if necessary.  Damage: Check the unit damage and notify Ecolab Customer Service if necessary.	Specialist
	<b>Product cylinder:</b> Dirt: Clean the product cylinder if necessary.	Specialist
Every six months	<b>Water inlet pipe and water-bearing components in the unit:</b> Tightness: As necessary. Replace seals or replace defective components.	Specialist Service personnel
	<b>Swivel outlet:</b> blockage Tightness: clean and rinse the swivel outlet, replace if necessary.	Operator Specialist
	<b>Spray nozzle:</b> Dirt: Descale and replace if necessary.	Specialist Service personnel
Every year	Check the flow rate	Service personnel

### 7.2 Maintenance and service work

#### 7.2.1 Clean the appliance

- Personnel:
- Operator
  - Trained personnel
- Protective equipment:
- Protective eyewear
  - Chemical resistant protective gloves

1. ► Wipe down the unit using a damp cloth.
2. ► Check the unit for secure attachment and external damage.
3. ► If applicable, check the display for damage and pixel errors.
4. ► Check the connector lines and cables for damage, secure fit and correct routing.

#### 7.2.2 Opening the front hatch

- Personnel:
- Operator
- Protective equipment:
- Protective eyewear
  - Chemical resistant protective gloves

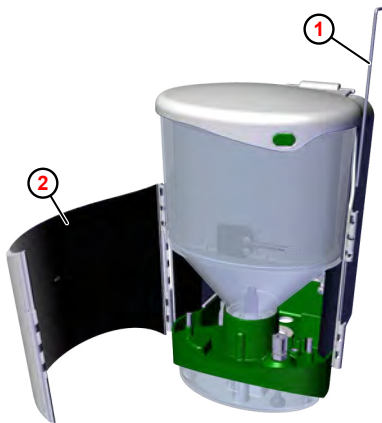


Fig. 9: Open the front flap (e.g. SMARTPOWER™ Rinse Dispenser)

1. ► Pull the hinge pin ① upwards out of the unit.
2. ► Open the front hatch ② .

### 7.2.3 Remove the product cylinder

- Personnel: ■ Operator
- Protective equipment: ■ Protective eyewear  
■ Chemical resistant protective gloves

#### Requirements:

- Angle valve for water supply closed.
- Hinged cover is open.
- Front hatch open. ➔ Chapter 7.2.2 'Opening the front hatch' on page 38



Fig. 10: Loosen the product cylinder

1. ➔ If necessary, remove the SMARTPOWER™ detergent capsule.
2. ➔ Unscrew the two countersunk screws (1) .
3. ➔ Remove the product cylinder (2) with the product feed (3) facing upwards.



Fig. 11: Remove the product feed

4. ➔ Pull the product feed (3) out of the product cylinder (2) .
5. ➔ ■ Clean the product feed using a damp cloth.  
■ Rinse product cylinder with clean water.

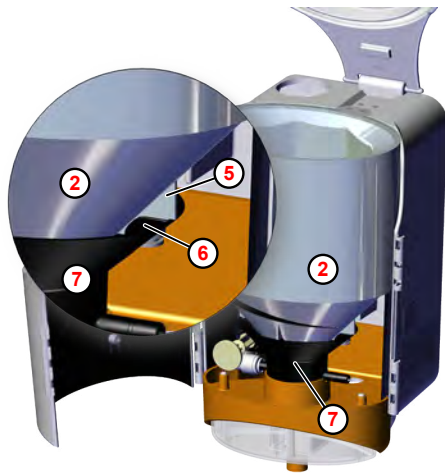


Fig. 12: Insert the product cylinder

**6.** Pay particular attention to the following during installation:

- Clean the O-ring (4) and the O-ring groove thoroughly.
- Grease the O-rings with petroleum jelly, replace if necessary.



*When inserting the product cylinder (2), make sure the tabs (5) on the product cylinder are between the guides on the (6) water distributor (7).*



### 7.2.4 Descale the water distributor and spray nozzle

- Personnel: ■ Service Personnel
- Protective equipment: ■ Protective eyewear  
■ Chemical resistant protective gloves
- Material: ■ Ecolab Sidosil® Intensive Limescale Remover



#### **WARNING!**

#### **Injuries from uncontrolled chemical spills**

Uncontrolled chemical spills can cause serious injuries.  
Use the personal protective equipment (PPE) specified in the safety data sheet for the chemical products.

#### **Requirements:**

- Angle valve for water supply closed.
- Front hatch open. ↗ Chapter 7.2.2 'Opening the front hatch' on page 38
- Product cylinder is removed. ↗ Chapter 7.2.3 'Remove the product cylinder' on page 39

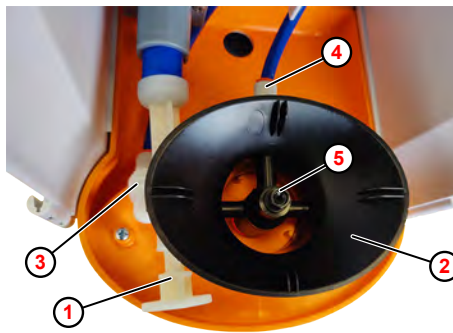


Fig. 13: Remove the water distributor and spray nozzle

1. ➤ Put some Sidosil® Intensive Rinse Aid in a cup or dish.



*The liquid should completely cover the spray nozzle.*

2. ➤ Unthread the button ① from the tab on the water distributor ② and remove it.
3. ➤ Disconnect the "bypass water" ③ and "spray nozzle" ④ connections from the water distributor and remove it.
4. ➤ Unscrew the spray nozzle ⑤ from the water distributor.
5. ➤ Dip the spray nozzle into the limescale remover and let it soak in for two minutes.
6. ➤ Rinse the spray nozzle thoroughly with clean water.

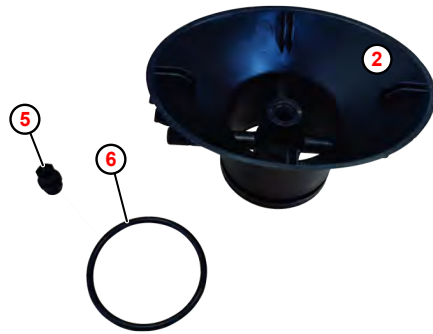


Fig. 14: Cleaning the water distributor

7. ➤ Clean the water distributor (2) and descale with limescale remover if necessary.
8. ➤ Clean the O-ring (6) and its groove, grease the O-ring with silicone grease.



Fig. 15: Clean RTU Spray Nozzle\_30

9. ➤ Check the spray nozzle:
  - Check the outlet (7) of the spray nozzle for limescale residues and dirt.
  - Check the vortex insert (8) on the underside for dirt and damage.



*If necessary, replace the spray nozzle.*

### 7.2.5 Remove the double check valve

- Personnel: ■ Service Personnel
- Protective equipment: ■ Protective eyewear  
■ Chemical resistant protective gloves

#### Requirements:

- Angle valve for water supply closed.
- Front hatch open. ↗ Chapter 7.2.2 'Opening the front hatch' on page 38
- Product cylinder is removed. ↗ Chapter 7.2.3 'Remove the product cylinder' on page 39

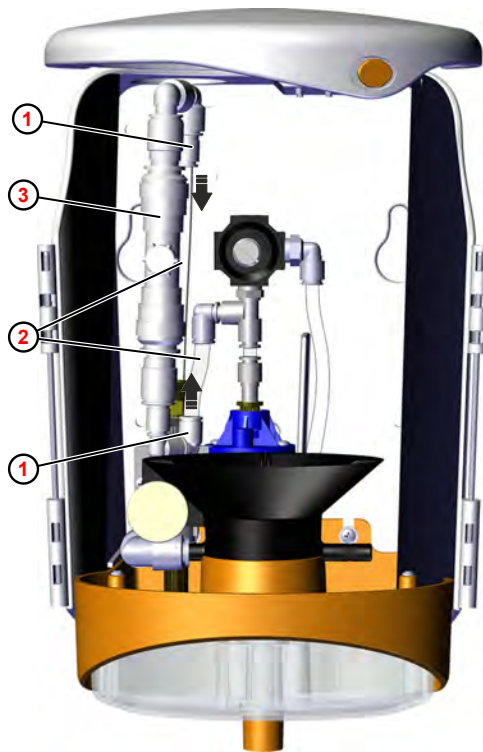


Fig. 16: Remove the double check valve

1. ➤ Press the retaining rings onto the plug-in couplings ① and disconnect the clean water pipes ② in the direction of the arrow.
2. ➤ Remove the double check valve ③ with its connecting parts from the unit.

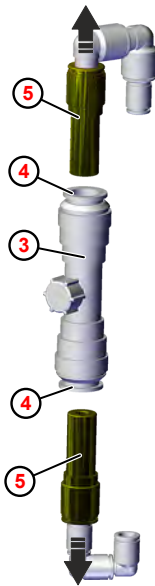


Fig. 17: Double check valve – remove connecting parts

3. ➤ Press the retaining rings onto the plug-in couplings ④ and remove the adapter with its connecting parts ⑤ in the direction of the arrow.
4. ➤ Pay particular attention to the following during installation:
  - When installing the double check valve ③, observe the flow direction (from top to bottom).
  - Push the clean water pipes into the plug-in couplings until you hear a click

### 7.2.6 Remove the clean water valve

- Personnel: ■ Service Personnel
- Protective equipment: ■ Protective eyewear  
 ■ Chemical resistant protective gloves

#### Requirements:

- Angle valve for water supply closed.
- Front hatch open. ↗ Chapter 7.2.2 'Opening the front hatch' on page 38
- Product cylinder is removed. ↗ Chapter 7.2.3 'Remove the product cylinder' on page 39
- Double check valve is removed. ↗ Chapter 7.2.5 'Remove the double check valve' on page 43
- Water distributor removed. ↗ Chapter 7.2.4 'Descale the water distributor and spray nozzle' on page 41

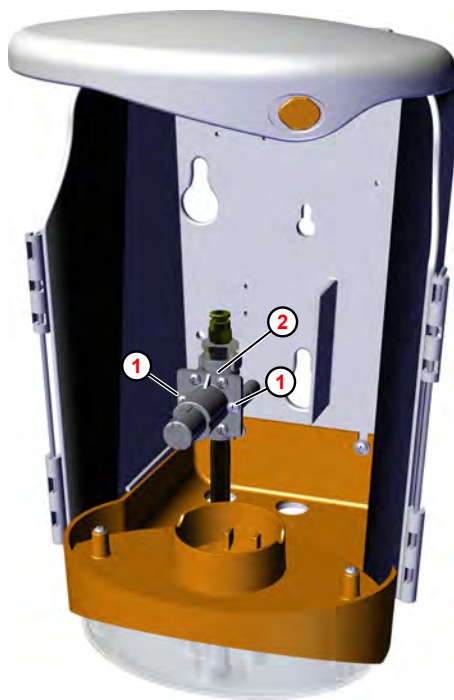


Fig. 18: Remove the clean water valve

1. ➤ Unscrew the water pipe at the water valve inlet.
2. ➤ Remove the screws ①.
3. ➤ Remove the clean water valve ② from the machine.
4. ➤ Pay particular attention to the following during installation:
  - Click the water pipes all the way into the plug-in couplings.

### 7.2.7 Remove the flow regulator and flow limiter

- Personnel: ■ Service Personnel
- Protective equipment: ■ Protective eyewear  
■ Chemical resistant protective gloves

#### Requirements:

- Angle valve for water supply closed.
- Front hatch open. ↪ *Chapter 7.2.2 'Opening the front hatch' on page 38*
- Product cylinder is removed. ↪ *Chapter 7.2.3 'Remove the product cylinder' on page 39*
- Water distributor removed. ↪ *Chapter 7.2.4 'Descale the water distributor and spray nozzle' on page 41*

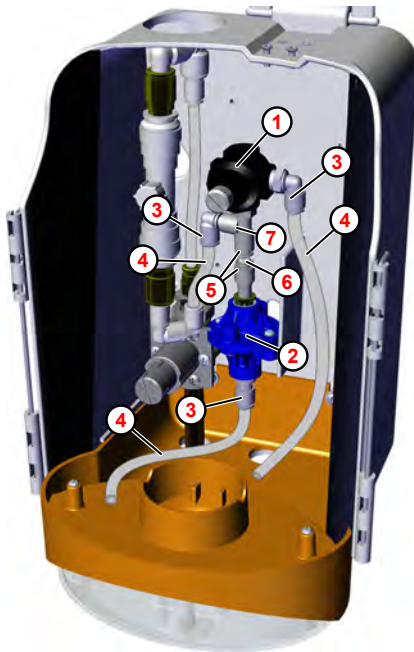


Fig. 19: Remove the flow regulator and flow limiter

1. ➤ Press the retaining rings onto the plug-in couplings (3) and disconnect the clean water pipe (4).
2. ➤ Remove the flow regulator (1) and flow limiter (2) together.
3. ➤ If necessary, press the retaining rings onto the plug-in couplings (5) and disconnect the clean water pipe (6).  
⇒ The flow regulator and flow limiter are separated from each other.
4. ➤ If necessary, unscrew the T-piece (7) from the flow regulator.
5. ➤ Pay particular attention to the following during installation:
  - Push the clean water pipes into the plug-in couplings until you hear a click.
  - If the flow regulator is replaced, have Ecolab Customer Service adjust the flow rate of the unit. ↪ *'Manufacturer' on page 11*

## 7.2.8 Check the flow rate

- Personnel: ■ Service Personnel
- Protective equipment: ■ Protective eyewear  
■ Chemical resistant protective gloves

### Requirements:

- Front hatch open. ↗ *Chapter 7.2.2 'Opening the front hatch' on page 38*
  - Product cylinder is removed. ↗ *Chapter 7.2.3 'Remove the product cylinder' on page 39*
  - The water pressure of the fresh water supply is 3 bar ± 0.5 bar.
1. ➤ Cover the nozzle with a suitable container so that no water splashes out of the water distributor.
  2. ➤ Feed the product drain pipe into a suitable container with quantity markers.
  3. ➤ Press the release button for one minute.
  4. ➤ Check how much water was extracted:
    - SMARTPOWER™ Manual Dispenser RTU: 7.5 l/min ±1.5 l/min
    - SMARTPOWER™ Presoak Dispenser RTU: 3 l/min ±1.5 l/min
    - SMARTPOWER™ Pot&Pan Soak Dispenser RTU: 3 l/min ±1.5 l/min
  5. ➤ If necessary, have the flow rate of the instrument adjusted by Ecolab Customer Service. ↗ *'Manufacturer' on page 11*

## 8 Operational faults and troubleshooting

Fault description	Cause	Remedy	Personnel
Dispenser does not work when the dispensing button is pressed.	Angle valve of the water supply closed.	Open the angle valve.	Operator
	Pushbutton pin has come out.	Attach the pushbutton pin to the clean water valve and thread it into the guide on the water distributor.	Operator
	Spray nozzle blocked.	Clean and descale the spray nozzle.	Service Personnel
	Faulty clean water valve.	Replace the clean water valve.	Service Personnel
	Water pressure of the clean water supply is too low	Check the water pressure of the onsite water supply, adjust if necessary.	Service Personnel
Dispenser is working, but no product is dispensed (no foam).	No product inserted or product is empty.	Insert product.	Operator
	Spray nozzle is clogged	Clean and descale the spray nozzle.	Service Personnel
Dispenser releases product even though the dispense button is not pressed (will not turn off).	Water valve is dirty	Clean or replace the water valve.	Service Personnel
	Water pressure of the clean water supply is too high	Check the water pressure of the onsite water supply, adjust if necessary.	Service Personnel
Product concentration too high or too low.	Clean water supply pressure too high or too low.	Check the water pressure of the onsite water supply, adjust if necessary.	Service Personnel
	Clean water temperature too high or too low.	Check the water pressure of the clean water supply, adjust if necessary.	Service Personnel
	Spray nozzle clogged or uneven spray.	Clean and descale the spray nozzle.	Service Personnel
	Product capsule dissolves unevenly.	Check the spray nozzle for blockages.	Service Personnel
Base section or equipment sump is overflowing.	Water pressure of the clean water supply is too high	Check the water pressure of the onsite water supply, adjust if necessary.	Service Personnel
	Product outlet or swivel outlet is blocked	Clean and check the product outlet and swivel outlet.	Operator



## 9 Spare parts

Wearing parts, spare parts and accessories are listed in a separate spare parts list.



*The most recent version of the spare parts list is always available to download online.*



To download the spare parts list to a PC, tablet or smartphone, use the link below or scan the QR code provided.

**SMARTPOWER™ RTU Dispenser Spare parts list:**

<http://www.ecolab-engineering.de/fileadmin/download/bedienungsanleitungen/institutional/Smartpower-spare-parts.pdf>

## 10 Technical data

In this chapter you will find the technical data of the SMARTPOWER™ RTU Dispenser.

### Dimensions

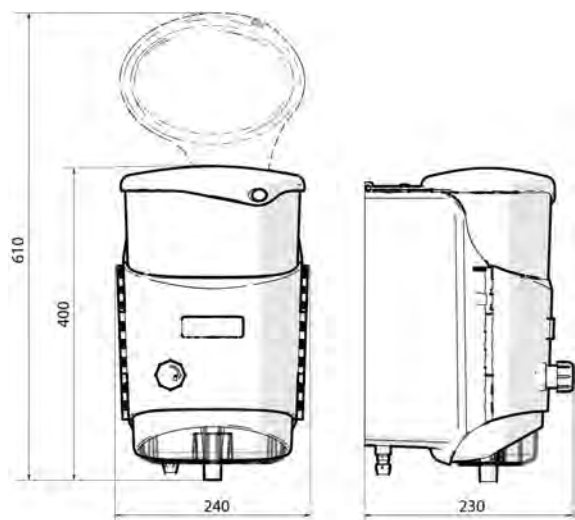


Fig. 20: Dimensions

Data	Value	Unit
Height (cover closed)	400	mm
Height (cover open)	610	mm
Width	240	mm
Depth	230	mm
Package size LxWxH	400x300x300	mm
Weight (unit without rinse aid capsule)	3,2	kg
Weight (including accessories and packaging)	5,4	kg

### General data

Data	Value	Unit
Protection degree	IP2X	
Equipment classification (degree of contamination)	PD2	
Water inlet connection:	3/8 thread	
Water pressure, static (max.)	6 (0,6)	bar (MPa)
Water pressure, dynamic (min.) (with water temperature at > 5° C)	1,8 (0,18)	bar (MPa)
Water pressure, dynamic (min.) (with water temperature at > 15° C)	1,5 (0,15)	bar (MPa)
Water temperature (max.)	60	°C
Water quality: Potable water (min.)	3	°d

**Flow rate**

Data	Value	Unit
SMARTPOWER™ Manual Dispenser RTU	450 ± 100	l/h
SMARTPOWER™ Presoak Dispenser RTU	180 ± 100	l/h
SMARTPOWER™ Pot&Pan Soak Dispenser RTU	180 ± 100	l/h

**Environmental load**

Data	Value	Unit
Noise pollution	< 70	dB(A)

**Ambient conditions**

Data	Value	Unit
Ambient temperature	5 - 40	°C
Relative humidity (non-condensing) (up to 31°C, linear reduction to 50% at 40°C)	80	%
Maximum operating height	2000	m
Approved area of use	Damp area	

## Nameplate

The nameplate contains the key technical information about the SMARTPOWER™ RTU Dispenser.



*You will need the information on the nameplate whenever you contact Ecolab Customer Services.*

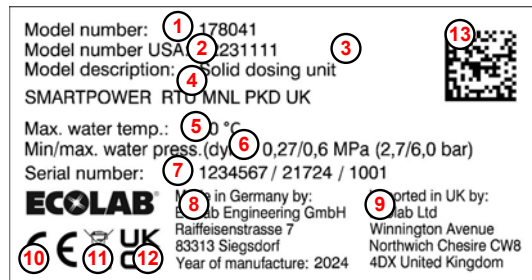


Fig. 21: Nameplate (example: SMARTPOWER™ Manual Dispenser RTU)

- |  |   |
|--|---|
| ① Part number  | number of pieces per production order (consecutive number starting with 1001)   |
| ② US part number   |   |
| ③ EBS number   | ⑧ Manufacturer address  |
| ④ Unit name  | ⑨ Importer in UK  |
| ⑤ Max. water temperature   | ⑩ Note on CE conformity   |
| ⑥ Min/max. Water pressure  | ⑪ Disposal regulation   |
| ⑦ Production code consisting of<br>production order number (six digits) /<br>production code with weekday (single digit, Monday = 1, Friday = 5), calendar week (two-digit), production year (two-digit) / | ⑫ Note on CE UKCA conformity  |
|  | ⑬ Data matrix code containing the following:<br>part number,<br>production code |

## 11 Decommissioning, removal and disposal

**NOTICE!**

The following disassembly description is the recommended method. However, different local conditions and physical factors will determine the most appropriate method for disassembly in practice.

**CAUTION!**

When working on parts that come into contact with dangerous products, the prescribed protective clothing (safety goggles, protective gloves, apron if necessary) must be used because of the risk of burns.

When working on the electrical connection of a dispenser unit (e.g. EcoPlus PDRX) all applicable international, national and local safety regulations must be observed.

For work on the power connection, isolate it first (i.e. shut down power).

**Recommended procedure**

1. ➤ Disconnect power to the unit (if necessary).
2. ➤ Remove the detergent capsule.
3. ➤ Remove chemical residue from the funnel, e.g. by cleaning in a dishwasher.
4. ➤ Close the hinged lid and operate the appliance with clean water for a few minutes.
5. ➤ Close the water inlet (using angle valve or similar) and remove the connection.
6. ➤ Disconnect the unit from its power source.
7. ➤ Drain the unit completely and clear all the chemical residue from inside the unit.
8. ➤ Either dispose of the unit in accordance with applicable national directives or package safely (cardboard box with padding material) and return to the Ecolab-authorized company for recycling.

## 11.1 Disposal and environmental protection

All components are to be disposed of in accordance with prevailing local environmental regulations. Dispose of them accordingly, depending on the condition, existing regulations and with due regard for current provisions and criteria.

### Recycle the dismantled components:

- Scrap all metals.
- Electrical waste and electronic components must be recycled.
- Recycle all plastic parts.
- Dispose of all other components in line with their material characteristics.
- Hand in batteries at communal collection points or dispose of them through a specialist.



#### **ENVIRONMENT!**

##### **Risk of environmental damage from incorrect disposal!**

##### **Incorrect disposal can be a threat to the environment.**

- Electrical scrap, electronic components, lubricants and other operating fluids must be disposed of by approved waste disposal service providers
- If in doubt, contact your local authority, or an approved waste disposal service provider, for information on correct disposal.

Prior to disposal, all parts which are in contact with media must be decontaminated. Oils, solvents, detergents and contaminated cleaning tools (brushes, cloths, etc.) must be disposed of in compliance with local requirements, in accordance with the prevailing waste code and with due attention to the notes contained in the manufacturers' safety data sheets.



#### **ENVIRONMENT!**

##### **Reduction or avoidance of waste from reusable raw materials**

Do not dispose of any components in the domestic waste. Take them instead to the appropriate collection points for recycling.

Please follow the Directive on Waste Electrical and Electronic Equipment 2012/19/EU, the aim and purpose of which is the reduction or prevention of waste from recyclable raw materials. This directive requires member states of the EU to increase the collection rate of electronic waste so that it can be recycled.

## 12 Certificates

### EC Declaration of Conformity

De
En
Fr

**Konformitätserklärung / Declaration of Conformity / Déclaration de Conformité**

**ECOLAB®**

ECOLAB Engineering GmbH  
Postfach 1164  
D-83309 Siegsdorf

Wir erklären hiermit, dass das folgende Produkt  
We herewith declare that the following product  
Nous déclarons que le produit suivant

Beschreibung / description / description	SMARTPOWER MANUAL DISPENSER RTU SMARTPOWER PRESOAK DISPENSER RTU SMARTPOWER POT & PAN SOAK DISPENSER RTU
Modell / model / modèle	178021/178022/178023 / 178040/178041/178042
Typ / part no / type	10034948/10034947/10050810/92231112 /92231111 /92231144
Gültig ab / valid from / valable dès:	2024-05-01

auf das sich diese Erklärung bezieht, der / den folgenden Norm(en) oder normativen Dokument(en) entspricht:  
to which this declaration relates is in conformity with the following standard(s) or other normative document(s):  
auquel se réfère cette déclaration est conforme à la (aux) norme(s) ou autre(s) document(s) normatif(s)

EN ISO 12100:2010  
EN1717:2011

gemäß den Bestimmungen der Richtlinie(n):  
following the provisions of directive(s):  
conformément aux dispositions de(s) directive(s):

2006/42/EG

Bevollmächtigter für die Zusammenstellung der technischen Unterlagen:  
Authorised person for compiling the technical file:  
Personne autorisée pour constituer le dossier technique:

Ecolab Engineering GmbH  
Postfach 1164  
D-83309 Siegsdorf

Ort und Datum der Ausstellung  
Place and date of issue  
Lieu et date

83313 Siegsdorf, 11.03.2024

-----

M. Niederbichler  
Geschäftsführer  
Company Manager  
Directeur

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D. Rodriguez  
Regulatory Affairs - Geräte  
Regulatory Affairs - Equipment  
Affaires Réglementaires - Matériel

Annex 1a to WI-EU-RDE-602 Rev. 4 / 2022-06-02

Fig. 22: CE Declaration for the SMARTPOWER™ RTU Dispenser

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