



U.S. ENVIRONMENTAL PROTECTION AGENCY
 Office of Pesticide Programs
 Antimicrobials Division (7510P)
 1200 Pennsylvania Ave., N.W.
 Washington, D.C. 20460

EPA Reg. Number:
 94277-1

Date of Issuance:
 12/23/19

NOTICE OF PESTICIDE:

Registration
 Reregistration
 (under FIFRA, as amended)

Term of Issuance:
 Unconditional

Name of Pesticide Product:
 KS AQVA

Name and Address of Registrant (include ZIP Code):

Abigail T.D. Wacek,
 Agent for KS Natec AG
 TSG Consulting
 1150 18th Street, NW, Suite 1000
 Washington, DC 20036

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Antimicrobials Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product when the Agency requires all registrants of similar products to submit such data.
2. The data requirements for storage stability and corrosion characteristics (Guidelines 830.6317 and 830.6320) are not satisfied. A one year study is required to satisfy these data requirements. You have 18 months from the date of registration to provide these data.

Signature of Approving Official:

Sincerely,

Demson Fuller, Product Manager 32
 Regulatory Management Branch I
 Antimicrobials Division (7510P)
 Office of Pesticide Programs

Date:

12/23/19

3. Make the following label changes before you release the product for shipment:
 - Revise the EPA Registration Number to read, “EPA Reg. No. 94277-1.”
4. Submit one copy of the revised final printed label for the record before you release the product for shipment.

Should you wish to add/retain a reference to the company’s website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product’s label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA’s Office of Enforcement and Compliance.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 08/28/2019

If you have any questions, please contact Melanie Bolden by phone at (703) 347-0165, or via email at Bolden.Melanie@epa.gov.

Sincerely,



Demson Fuller, Product Manager 32
Regulatory Management Branch II
Antimicrobials Division (7510P)
Office of Pesticide Programs

Enclosure

{Administrative Note: Brackets [] throughout label indicate optional or instructional language.}

KS AQVA

Ready-to-use food contact sanitizer for use on external surfaces of beverage dispensing systems

Active Ingredient:

Sodium hypochlorite..... 0.02%

Other Ingredients..... 99.98%

Total..... 100.000%

EPA Reg. No: 94277-R **EPA Est. No.:** XXXXX-XX-XXX **Net Contents:** XXX

Manufactured For:
KS Natec AG
Trägerhardtstrasse 63
CH 5430 Wettingen
Switzerland



**KEEP OUT OF REACH OF CHILDREN
CAUTION**

First Aid	
If in Eyes	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a Poison Control Center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor or going for treatment. For general information on product use, etc., call the National Pesticides Information Center at 1-800-858-7378.	

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

KS AQVA Sanitizer, Spray bottle 400 ml/13.5 fl.oz

KS AQVA may be used as a food-contact sanitizing spray for use on external, hard nonporous surfaces of water dispensing units, nozzles and diffusers of beverage towers, ice cube makers. To sanitize, pre-clean visibly soiled surfaces. Spray product on surface. A 1 minute contact time is required. Reapply as necessary to ensure that the surface remains wet for entire contact time. All surface should be allowed to come to room temperature prior to sanitization.

KS AQVA Cleaning solution, BiB 5000 ml / 169 fl.oz

When diluted, KS AQVA may be used as a cleaning agent for water dispensing units, nozzles and diffusers of beverage towers, syrup-BiB (Bag-in-Box) connectors, soft-drinking beverage

{Administrative Note: Brackets [] throughout label indicate optional or instructional language.}

systems, syrup lines, ice cube makers, and beer lines. To clean, mix KS AQVA with potable water at a ratio of 1:2. Allow the mixture to sit and absorb for 1 hour to thoroughly clean.

See user manual(s) for Directions for Use and additional instructions.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS: CAUTION. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wear protective eyewear. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the restroom. Remove and wash contaminated clothing before reuse.

PHYSICAL OR CHEMICAL HAZARDS: STRONG OXIDIZING AGENT: Mix only with water according to label directions. Do not mix with other chemicals. Mixing this product with chemicals (e.g. ammonia, acids, detergents, etc.) or organic matter (e.g. urine, feces, etc.) may release chlorine gas and other hazardous gases irritating to eyes, lungs, and mucous membranes.

ENVIRONMENTAL HAZARDS

[For containers > 5 gallons:]

This pesticide is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

[For containers ≤ 5 gallons:]

This product is toxic to fish, aquatic invertebrates, oysters, and shrimp.

STORAGE AND DISPOSAL

Do not contaminate food or feed by storage or disposal or cleaning of equipment.

STORAGE: Do not contaminate food or feed by storage, disposal, or cleaning of equipment. Store this product in a cool dry area, away from direct sunlight and heat to avoid deterioration. In case of spill, flood areas with large quantities of water. Product or rinsates that cannot be used must be diluted with water before disposal in a sanitary sewer. Pressurized container: may burst if heated. Keep away from heat, hot surfaces, sparks, open flames or other sources of ignition. Do not smoke. Do not pierce or burn, even after use. Protect from sunlight. Do not expose to temperatures above 122°F/50°C. Do not store or use at temperatures below 32°F/0°C!

PESTICIDE DISPOSAL: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING: Nonrefillable container. Do not reuse or refill this container. If empty: Place in trash or offer for recycling, if available. If partly filled: Call your local solid waste agency for disposal instructions

KS AQVA (94277-R)

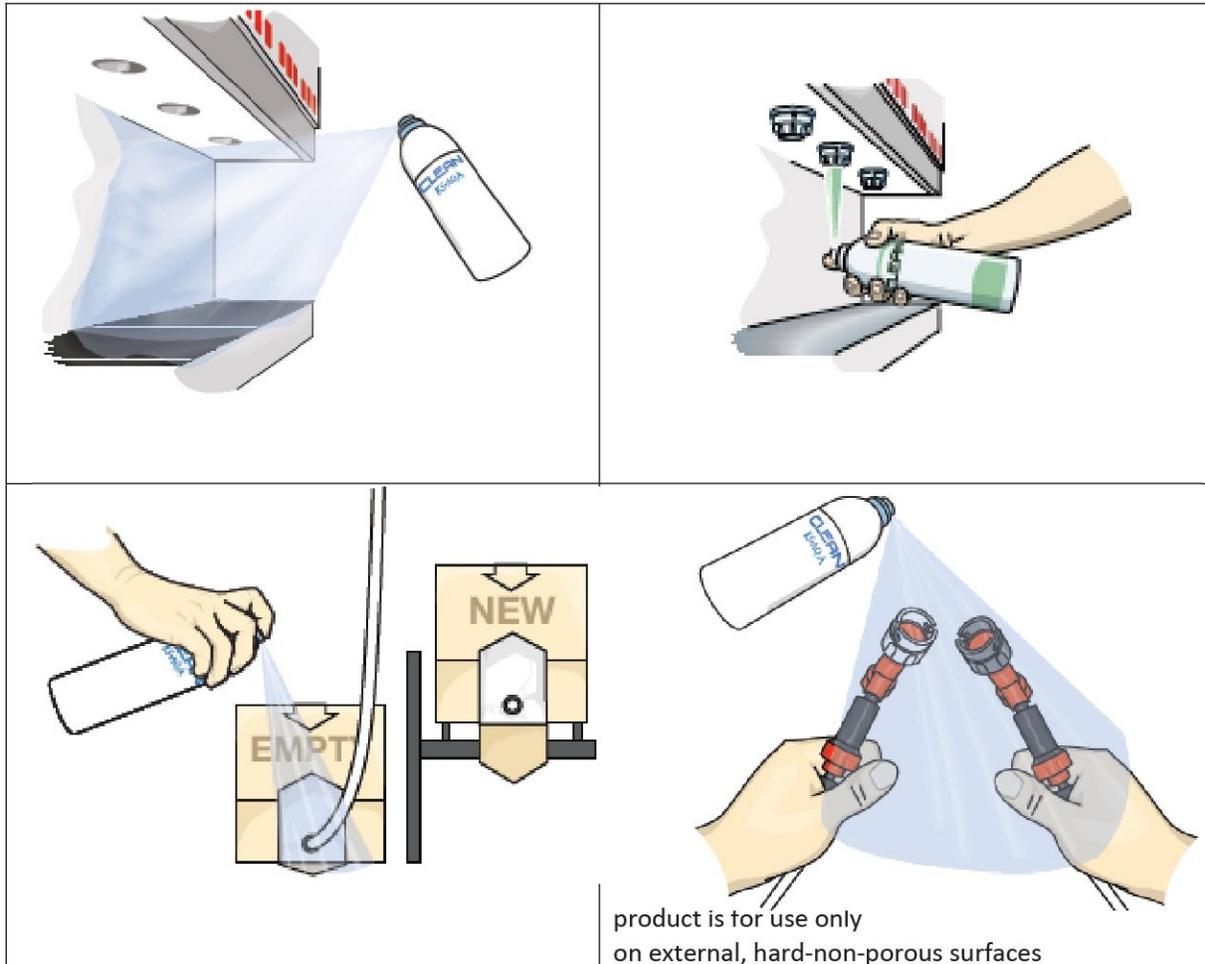
KS Natec AG

A540 – December 5, 2018, Label Version (8) December 19, 2019

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STANDARD OPERATION PROCEDURE FOR MAINTENANCE AND RESTAURANT STAFF

TREATMENT OF BEVERAGE DISPENSING SYSTEMS WITH KS®AQA



TREATMENT OF SOFT-DRINK BEVERAGE SYSTEMS WITH CARBONATOR

TREATMENT OF SYRUP LINES

TREATMENT OF NOZZLES AND DIFFUSORS OF BEVERAGE TOWERS

TREATMENT OF SYRUP-BIB CONNECTORS

TREATMENT OF ICE CUBE MAKER

TREATMENT OF WATER DISPENSING UNITS WITH
COOLER AND CARBONATOR

TREATMENT OF BEER LINES

Treatment of Soft-Drink Beverage system with carbonator

From the water inlet, e.g., from the water filter system to the post-mix valves

Materials

For perfectly flavored beverages with carbonated water, the cleaning of the beverage system downstream of the water inlet (from the water filter system to the post-mix valves) must be done regularly. This ensures a high beverage quality and avoids off-flavors.

Article no.	KS®AQVA Product	Supply	Pc.
	KS AQVA Sanitizer , Spray Bottle 400 ml / 13.5 fl.oz		1
	KS AQVA Cleaning solution , BiB 5000 ml / 169 fl.oz		2

Article no.	Required devices and tools	Supply	Pc.
	Pressure tank approx. 30 l / 7.9 gal (alternatively approx.19 l / 5 gal.)		1
	1/2" Universal adapter with non-return valve		1
	Connecting line		1
	Flush test strip 0- 350 ppm		20
	Bypass plugin (according to filter make)		3-4

DIRECTIONS FOR USE – IMPORTANT NOTICE

IMPORTANT!

In the following application two products are used:

- **KS AQVA Sanitizer, Spray bottle 400 ml/13.5 fl.oz**

DIRECTIONS FOR USE: KS AQVA Sanitizer may be used as a food-contact sanitizing spray for use on hard nonporous surfaces of water dispensing units, nozzles and diffusers of beverage towers, Syrup BiB-connectors, ice cube makers, keg-adapters and taps of beer dispensing units

To sanitize, spray product on surface. A 1 minute contact time is required.

Reapply as necessary to ensure that the surface remains wet for entire contact time.

- **KS AQVA Cleaning solution, BiB 5000 ml / 169 fl.oz**

DIRECTIONS FOR USE: KS AQVA Cleaning solution may be used as a cleaning agent for water dispensing units, soft-drinking beverage systems, syrup lines, nozzles and diffusers of beverage towers, ice cube makers, and beer lines.

To clean, mix KS AQVA with clean potable water at a ratio of 1:2. Allow the mixture to sit and absorb for 1 hour to thoroughly clean the system.



Preparation - Step 1-5

- 1 Attach warning notices (ideally a warning sign on a chain with symbols and text) to all beverage towers:

ATTENTION!

Cleaning work, system out of order, do not dispense any beverages!



- 2 Take photographs of the beverage towers for the final check, so that the correct beverage types are associated with the respective post-mix valves (if valves with cover flaps were used)

- 3

IMPORTANT!

Perform proper hand hygiene or use disposable gloves!



- 4 During the initial cleaning with KS AQVA Cleaning solution, the ½" universal adapter with non-return valve must first be installed in the beverage system's water inlet (upstream of the water filter system). (Required effort approx. 10 minutes, see assembly instructions "Assembly of universal adapter").

In this case, an additional check of all water-carrying lines in the system upstream of the water filter system for dead pipes must be conducted (old Lift mixing valve, supply to orange juice dispenser, shut-down streamers, etc.)!

- 5 Conduct and document quality checks:

- Off-flavor
- Beverage temperature
- Mixing ratio
- Carbonization

Unscrewing the filters / insertion of the blind plugs - Step 6

- 6 Close the water valve at the beverage system's freshwater inlet and unscrew all filters from the water filter system. After pre-cleaning visibly soiled surfaces, spray and sanitize the bypass plug (blind plug) and the screw-fitting bayonet of the filter heads with KS AQVA Sanitizer. Allow to sit for 1 minute. Re-apply as necessary to ensure surface remains wet for entire contact time. Screw in the bypass plug instead of the filters."

IMPORTANT!

If the filters are intended to be reinserted after cleaning, they must be cleanly stored in a covered, sanitized stainless steel bucket (e.g., in the plus cooling chamber)!



Prepare KS AQVA Cleaning solution in the pressure tank (approx.19 l / 5 gal or 30 l / 7.9 gal) - Step 7

- 7 Fill the **19 l / 5 gal** pressure tank each with 1 pc. BiB = 5.0 l / 1.3 gal KS AQVA and add 10.0 l / 2.6 gal **of clean potable water. (at a ratio of 1:2)**, this results in 15.0 l / 3.9 gal KS AQVA Cleaning solution.
In the **30 l / 7.9 gal** pressure tank, add 2 pc. BiB = 10.0 l / 2.6 gal and 20.0 l / 5.3 gal of **clean potable water**, this results in 30.0 l / 7.9 gal KS AQVA Cleaning solution.
Check the concentration of the cleaning solution with a test strip (approx. 55-70 ppm)
Close the Pressure tank.
As a rule, 2 pc. BiB with 5.0 l / 169 fl. oz KS AQVA are required, i.e., **30.0 l / 7.9 gal KS AQVA** Cleaning solution !

Sanitize the couplings, connect the pressure tank with the universal adapter - Step 8-10

- 8 After pre-cleaning visibly soiled surfaces, spray and sanitize, contact time 1 min., the 3-pin coupling of the connection line and the tank connection on the Pressure tank with KS AQVA Sanitizer. Connect the 3-pin coupling of the connection line to the Pressure tank.
- 9 After pre-cleaning visibly soiled surfaces, spray and sanitize, contact time 1 min., the quick-lock coupling of the connection line to the universal adapter with KS AQVA Sanitizer and connect to the universal adapter
- 10 Detach the 2-pin coupling of the CO₂ line, after pre-cleaning visibly soiled surfaces, spray and sanitize, contact time 1 min., the coupling and the tank connection on the Pressure tank with KS AQVA Sanitizer and connect it to the Pressure tank.

Fill carbonator with KS AQVA Cleaning solution and let it work - Step 11-15

- 11 Close the syrup ball taps of the mixing valves on all beverage towers.

12

NOTE!

Dispense from all post-mix valves with carbonated water (one valve at a time) until an obvious color change becomes apparent on each respective new flush test strip, approx. 55-70 ppm. Do not continue dispensing after the color change.



13

ATTENTION!

Conduct an interim check to ensure that a sufficient amount of cleaning solution remains in the Pressure tank; otherwise, the carbonator and circulation pumps may run dry. If the pressure tank is refilled with KS AQVA Cleaning solution, first pressure-bleed the pressure tank outside (otherwise there is a high risk due to escaping CO₂!). Fill the Pressure tank, described under No. 7.



- 14 Allow KS AQVA Cleaning solution in the entire pipeline system and in the carbonator up to the post-mix valves to **sit and absorb for 1 hour** to thoroughly clean the system.
- 15 Clamp off the cleaning container and empty outside

Sanitize filter head and assembly, empty system and refill it - Step 16-21

- 16 Unscrew the bypass plug (blind plug) at the beverage system's water inlet and store while the valve is still closed, After pre-cleaning visibly soiled surfaces, spray and sanitize, contact time 1 min., the thread of the filter heads with KS AQVA Sanitizer and screw into the water filter system
- 17 Close the water supply to the carbonator and switch off the carbonator and circulation pump
- 18 Pull water on the tower until nothing but CO₂ streams out, thereby almost completely removing the cleaning solution
- 19 Open the main water inlet downstream of the universal adapter
- 20 Switch the carbonator pump(s) back on and allow the carbonator tank to fill up. Bleed the system at the dispenser towers in increments until practically nothing but carbonated water without gas bubbles escapes. Switch the circulation pump back on.

ATTENTION!

Carry out the steps for emptying and refilling of the carbonator ring line with extreme care; otherwise there is a risk of damage to the carbonator and circulation pumps!



- 21 Repeat steps 18-21 three times at approx. 5-minute intervals

NOTE!

Check for absence of cleaning solution in all mixing valves by means of flush test strips, and pay particular attention to still water lines !

**Final flushing and start-up - Step 22-28**

- 22 Flush thoroughly once more and check for any off-flavors in the carbonated water
- 23 Upon conclusion of the cleaning of all syrup lines, prepare post-mix valves (see No. 2, if the cover flaps had to be removed), insert nozzles.
- 24 Check for off-flavors at all mixing valves, proceeding with particular care for Sprite, Coca Cola Light, etc.
- 25 Check the mixing ratios and adjust, if needed; check carbonation as soon as the beverage temperature has fallen below 4°C.

IMPORTANT!

Only release the beverages once their perfect flavor quality can be guaranteed!



- 26 Remove the warning signs, clean the dispenser tower(s) and release the beverages for sale.
- 27 Clean the work area, dispose of BiB cartons and films.

28

IMPORTANT!

Enter all conducted cleaning activities immediately in the respective documentation!



Treatment of Syrup lines

From BiB to the syrup pumps and the post-mix valves

Materials

For perfectly flavored beverages with syrup, the cleaning of the syrup system from BiB to the post-mix valves is done regularly. This ensures a high beverage quality and avoids off-flavors.

Article no.	KS®AQVA Product	Supply	Pc.
	KS AQVA Sanitizer, Spray Bottle 400 ml / 13.5 fl. oz		1
	KS AQVA Cleaning solution, BiB 5000 ml / 169 fl. oz		3

Article no.	Required devices and tools	Supply	Pc.
	Clean metal bucket approx.15 l / 4 gal or syrup cleaning barrel		1
	Syrup adapter or thread of the syrup bag		1
	Flush test strip 0- 350 ppm		20

DIRECTIONS FOR USE – IMPORTANT NOTICE

IMPORTANT!

In the following application two products are used:

- **KS AQVA Sanitizer, Spray bottle 400 ml/13.5 fl.oz**

DIRECTIONS FOR USE: KS AQVA Sanitizer may be used as a food-contact sanitizing spray for use on hard nonporous surfaces of water dispensing units, nozzles and diffusers of beverage towers, Syrup BiB-connectors, ice cube makers, keg-adapters and taps of beer dispensing units

To sanitize, spray product on surface. A 1 minute contact time is required.

Reapply as necessary to ensure that the surface remains wet for entire contact time.

- **KS AQVA Cleaning solution, BiB 5000 ml / 169 fl.oz**

DIRECTIONS FOR USE: KS AQVA Cleaning solution may be used as a cleaning agent for water dispensing units, soft-drinking beverage systems, syrup lines, nozzles and diffusers of beverage towers, ice cube makers, and beer lines.

To clean, mix KS AQVA with clean potable water at a ratio of 1:2. Allow the mixture to sit and absorb for 1 hour to thoroughly clean the system.



Preparation - Step 1-3

- 1 Attach warning notices (ideally a warning sign on a chain with symbols and text) to all beverage towers:

ATTENTION!

Cleaning work, system out of order, do not dispense any beverages!



- 2 Photographs (take pictures) of the beverage towers for the final check, so that the correct beverage types are associated with the respective post-mix valves (if valves with cover flaps were used)

3

IMPORTANT!

Perform proper hand hygiene or use disposable gloves!



Sanitize couplings, pre-cleaning and rinsing of the system - Step 4-11

- 4 After pre-cleaning visibly soiled surfaces, spray and sanitize the syrup adapter with KS AQVA Sanitizer. allow to sit for 1 minute. Re-apply as necessary to ensure surface remains wet for entire contact time. Then place in a clean bucket with a content of approx. 15 l / 4 gal (or use syrup cleaning barrel).
- 5 Disconnect syrup lines from the syrup B.i.B.s, after pre-cleaning visibly soiled surfaces, spray and sanitize, contact time 1 min., all connections with KS AQVA Sanitizer and mount on the syrup adapter
- 6 Fill 15 l / 4 gal bucket with clean, warm potable water (maximum 40°C)
- 7 Set all post-mix valves on all beverage tower exclusively to syrup supply
- 8 Continue to dispense from all post-mix valves with syrup until only clear water flows out
- 9 Refill 15 l / 4 gal bucket with **clean**, warm potable water (maximum 40°C), as needed
- 10 Check that the automatic selector valves are flushed out, as well (see No. 11)

11

NOTE!

It is common for 2 Coca-Cola BiBs with 2 syrup lines to be conducted into one selector valve (ASV). From the selector valve, 1 line leads to the syrup pump. When a BiB is empty, the automatic selector valve automatically switches to the full BiB.

Wherever 2 lines lead to a automatic selector valve, these lines must be alternatively (at least 2 times) detached from the syrup adapter and then refitted during the pre-rinse, the cleaning and the final rinse. Only this guarantees the proper rinsing or cleaning of both syrup lines up to and including the automatic selector valve. Please conduct an optical check, as well!



Mix KS AQVA Cleaning solution in the container - Step 12

- 12 Fill the bucket or syrup cleaning barrel with 1 pc. BiB = 5.0 l / 1.3 gal KS AQVA Cleaning solution and add 10.0 l / 2.6 gal **of clean potable water (at a ratio of 1:2)**, this results in 15.0 l / 3.9 gal KS AQVA cleaning solution.
Normally on a tower with 8 lines 3 pc. BiB with 5.0 l / 1.3 gal KS AQVA are required, i.e., **45.0 l / 11.9 gal KS AQVA Cleaning solution** cleaning solution !

Cleaning - Step 13-16

13

NOTE!

Dispense from all post-mix valves with syrup (one valve at a time) until an obvious color change becomes apparent on the flush test strip, approx. 55-70 ppm. Do not continue dispensing after the color change.



14

IMPORTANT!

Check that the storage container (bucket) always contains a sufficient amount of cleaning solution. Refill as needed, as described (in No. 12).



15 Check that the automatic selector valves are also flooded with KS AQVA Cleaning solution (see No. 11)

16 Let the KS AQVA Cleaning solution **sit and absorb for 1 hour**, to thoroughly clean the system, in all syrup lines, automatic selector valves and syrup pumps upstream of the BiB connections,

Rinsing of the system - Step 17-19

17 Fill the clean, empty 15 l/ 4 gal bucket with potable water and dispense from all syrup post-mix valves until the flush test strips no longer show a discoloration

18 Check that the bucket always contains a sufficient amount of **clean potable water**, and refill as needed

19 Check that the automatic selector valves are flushed out, as well (see No. 12)

Sanitize couplings, connect Syrup and start-up - Step 20-27

20 Detach syrup lines individually from the syrup adapter, after pre-cleaning visibly soiled surfaces, thoroughly spray and sanitize, contact time 1 min., outside of connections of the syrup lines and the connections to the BiB with KS AQVA Sanitizer and reattach the syrup lines to the BiB.

IMPORTANT!

Pay attention to the connections' colors; mount the correct syrup line to the respective BiB!



21 Continue to dispense from all post-mix valves with syrup until only syrup flows out (without water)

22 Check that all settings are correct at all beverage towers and post-mix valves

23 Check by means of the photographs of the beverage towers (see No. 2) whether the proper beverage types have been assigned to the respective post-mix valves

24 Conduct a taste test of all beverage types

IMPORTANT!

Only release the beverages once their perfect flavor quality can be guaranteed!



25 Remove the warning signs, clean the dispenser tower(s) and release the beverages for sale.

26 Clean the work area, dispose of BiB cartons and films.

27

IMPORTANT!

Enter all conducted cleaning activities immediately in the respective documentation!



Treatment of Ice cube maker

From the water inlet, e.g., upstream of the water filter system or the ice cube maker, respectively

Materials

For perfect-tasting ice, the ice cube maker is cleaned from the water inlet upstream of the water filter system, including the entire ice cube maker. This ensures a high ice quality and avoids off-flavors.

Article no.	KS® AQVA Product	Supply	Pc.
	KS AQVA Sanitizer, Spray Bottle 400 ml / 13.5 fl.oz		1
	KS AQVA Cleaning solution, BiB 5000 ml / 169 fl.oz		1

Article no.	Required devices and tools	Supply	Pc.
	Pressure tank approx. 30 l / 7.9 gal (alternatively approx. 19 l / 5 gal.)		1
	1/2" Universal adapter with non-return valve		1
	Connecting line		1
	3-pin coupling / 3/8" adapter (in case of direct connection to ice cube maker)		1
	Flush test strip 0- 350 ppm		20
	Bypass plugin (according to filter make)		3- 4

DIRECTIONS FOR USE – IMPORTANT NOTICE

IMPORTANT!

In the following application two products are used:

- **KS AQVA Sanitizer, Spray bottle 400 ml/13.5 fl.oz**

DIRECTIONS FOR USE: KS AQVA Sanitizer may be used as a food-contact sanitizing spray for use on hard nonporous surfaces of water dispensing units, nozzles and diffusers of beverage towers, Syrup BiB-connectors, ice cube makers, keg-adapters and taps of beer dispensing units

To sanitize, spray product on surface. A 1 minute contact time is required.

Reapply as necessary to ensure that the surface remains wet for entire contact time.

- **KS AQVA Cleaning solution , BiB 5000 ml / 169 fl.oz**

DIRECTIONS FOR USE: KS AQVA Cleaning solution may be used as a cleaning agent for water dispensing units, soft-drinking beverage systems, syrup lines, nozzles and diffusers of beverage towers, ice cube makers, and beer lines.

To clean, mix KS AQVA with clean potable water at a ratio of 1:2. Allow the mixture to sit and absorb for 1 hour to thoroughly clean the system.



IMPORTANT!

Before the cleaning of the ice cube maker, it is essential that the entire system is properly decalcified.

The cleaning of the ice cube maker is not possible unless the system has been thoroughly and cleanly decalcified.

**Preparation - Step 1-3**

- 1 Mark the ice cube maker with a sign

ATTENTION!

Cleaning work, system out of order



- 2

IMPORTANT!

Perform proper hand hygiene or use disposable gloves!



- 3 During the initial cleaning with KS AQVA Cleaning solution, the ½" universal adapter with non-return valve must first be installed in the beverage system's water inlet (upstream of the water filter system). (Required effort approx. 10 minutes, see assembly instructions "Assembly of universal adapter").

- 4

IMPORTANT!

Alternative to the feed via the main water supply and the water filter system, the pressure tank can also be flange-mounted directly to the ice cube maker. This eliminates steps 3 through 5.

**Sanitize by-pass plug, unscrew the filters / insertion of the blind plugs - Step 5**

- 5 Close the water valve at the beverage system's freshwater inlet and unscrew all filters from the water filter system. After pre-cleaning visibly soiled surfaces, spray and sanitize, contact time 1 min., the bypass plug (blind plug) and the screw-fitting bayonet of the filter heads with KS AQVA Sanitizer, screw in the bypass plug in place of the filters. Reapply an necessary to ensure surface remains wet for entire contact time.

IMPORTANT!

If the filters are intended to be reinserted after cleaning, they must be cleanly stored in a covered, sanitized stainless steel bucket (e.g., in the plus cooling chamber)!

**Prepare KS AQVA Cleaning solution in the pressure tank (15 or 30 l) - Step 6**

- 6 Fill the **19 l / 5 gal** pressure tank each with 1 pc. BiB = 5.0 l / 1.3 gal KS AQVA and add 10.0 l / 2.6 gal **of clean potable water. (at a ratio of 1:2)**, this results in 15.0 l / 3.9 gal KS AQVA Cleaning solution.
In the **30 l / 7.9 gal** pressure tank, add 2 pc. BiB = 10.0 l / 2.6 gal and 20.0 l / 5.3 gal of **clean potable water**, this results in 30.0 l / 7.9 gal KS AQVA Cleaning solution.
Check the concentration of the cleaning solution with a test strip (approx. 55-70 ppm)
Close the Pressure tank.

Sanitize couplings and connect the pressure tank with the universal adapter - Step 7-10

- 7 After pre-cleaning visibly soiled surfaces, spray and sanitize, contact time 1 min., the 3-pin coupling of the connection line and the tank connection on the Pressure tank with KS AQVA Sanitizer. Connect the 3-pin coupling of the connection line to the Pressure tank. Alternatively, when connecting to the ice cube maker, directly use the 3-pin coupling / 3/8" adapter.
- 8 After pre-cleaning visibly soiled surfaces, spray and sanitize, contact time 1 min., the quick-lock coupling of the connection line to the universal adapter with KS AQVA Sanitizer and connect to the universal adapter
- 9 Detach the 2-pin coupling of the CO₂ line, After pre-cleaning visibly soiled surfaces, spray and sanitize, contact time 1 min., the coupling and the tank connection on the Pressure tank with KS AQVA Sanitizer and connect it to the Pressure tank.
- 10 This concludes the preparations for the flooding of the ice cube maker.

Emptying the ice cube maker and sanitizing the components - Step 11-15

- 11 Completely empty the ice cube maker

12	<p>NOTE! Carefully disassemble the components in accordance with the manufacturer's instructions. These vary from model to model.</p>	
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13	<p>ATTENTION! Carefully clean all components by hand.</p>	
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14	<p>ATTENTION! Generously, After pre-cleaning visibly soiled surfaces spray and sanitize, contact time 1 min., hard-to-reach areas with KS AQVA Sanitizer. Reapply as necessary to ensure that the surface remains wet for entire contact time</p>	
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15	<p>ATTENTION! After pre-cleaning visibly soiled surfaces, spray and sanitize, contact time 1 min., all components with KS AQVA Sanitizer prior to their installation. Reapply as necessary to ensure that the surface remains wet for entire contact time</p>	
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With KS AQVA Cleaning solution, start the ice cube maker's cleaning cycle - Step 16-21

- 16 Close the water inlet (feed water) directly upstream of the water inlet into the ice cube maker and disconnect it from the device. (This applies equally for the connection via universal adapter and for direct connection)
- 17 Pull water with cleaning solution into the water supply line. Check with a flush test strip, until an obvious color change becomes apparent, approx. 55-70 ppm.
- 18 Reconnect the line to the ice cube maker.
- 19 Open the water inlet valve for approx. 3 minutes and flood the ice cube maker with KS AQVA Cleaning solution (see the respective operating instructions for the ice cube maker).

20

ATTENTION!

Check with the flush test strip in the storage pan whether an obvious color change is apparent (corresponds to approx. 55-70 ppm)!



21

Allow KS AQVA Cleaning solution in the water supply line and the ice cube maker to **sit and absorb for 1 hour** to thoroughly clean the system.

Flushing and start-up - Step 22-28

22

Dismount the Pressure tank and carry out steps 7-11 in reverse order.

23

Thoroughly flush the ice cube maker with clean potable water.

24

Start up the ice cube maker again (according to model and operating instructions)

25

IMPORTANT!

**After start-up, the first 3-5 plates must be discarded!
After that, it is essential to conduct a visual, odour and taste test!**



26

Remove the warning signs, clean and release the ice cube maker.

27

Clean the work area, dispose of BiB cartons and films.

28

IMPORTANT!

Enter all conducted cleaning activities immediately in the respective documentation!



Treatment of Water dispensing units with cooler and carbonator (with automatic cleaning program)

From the water inlet, e.g., from the water filter system to the point of use

Materials

For perfectly flavored beverages with carbonated water, the cleaning of the beverage system downstream of the water inlet (from the water filter system to the post-mix valves) must be done regularly. This ensures a high beverage quality and avoids off-flavors.

Article no.	KS®AQVA Product	Supply	Pc.
	KS AQVA Sanitizer, Spray Bottle with thread 400 ml / 13.5 fl.oz		1

Article no.	Required devices and tools	Supply	Pc.
	Filter Adapter (different models)		1

DIRECTIONS FOR USE – IMPORTANT NOTICE

IMPORTANT!

In the following application is used:

- KS AQVA Sanitizer, Spray bottle with thread 400 ml/13.5 fl.oz

DIRECTIONS FOR USE: KS AQVA Sanitizer may be used as a food-contact sanitizing spray for use on hard nonporous surfaces of water dispensing units, nozzles and diffusers of beverage towers, Syrup BiB-connectors, ice cube makers, keg-adapters and taps of beer dispensing units

To sanitize, spray product on surface. A 1 minute contact time is required.

Reapply as necessary to ensure that the surface remains wet for entire contact time.



Preparation

- 1 Attach warning notices to the unit, the fitting must not to be used during the cleaning process !

ATTENTION!

Cleaning work, system out of order, do not dispense any beverages!



- 2 For leaking water ensure free draining during the cleaning process.
- 3 The cleaning process cannot be interrupted, after a power failure it starts at the beginning.
- 4 The progress of the process (C1-C9) is shown in the display at the cooler.

ATTENTION!

Pressurised container. Content under pressure. Protect from sunlight and do not expose above 50°C. Do not puncture or incinerate even after use. Avoid spraying in the eyes. This container is not intended for use by persons (including children) with physical, sensory or mental impairments or a lack of experience or knowledge in using containers of this type. Use only as directed. Store in a cool place (10-15°C). Eco-friendly non flammable prepellant (nitrogen)



Installation - Step 1-7

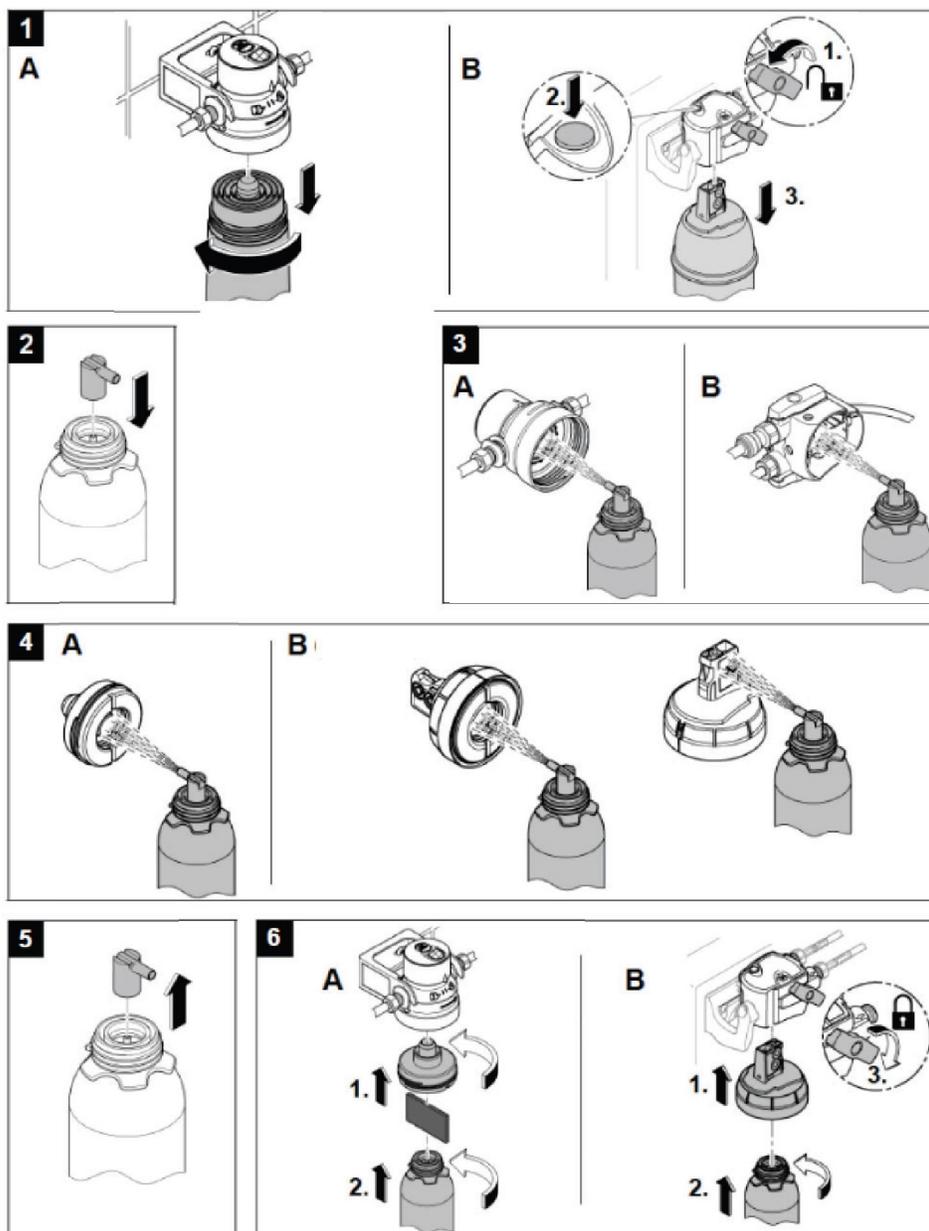
- 1 Close the handle of the faucet. Remove the filter cartridge.
- 2 Stick spray head onto KS AQVA Sanitizer cartridge.

IMPORTANT!

Perform proper hand hygiene and/or use one-way sterile gloves !



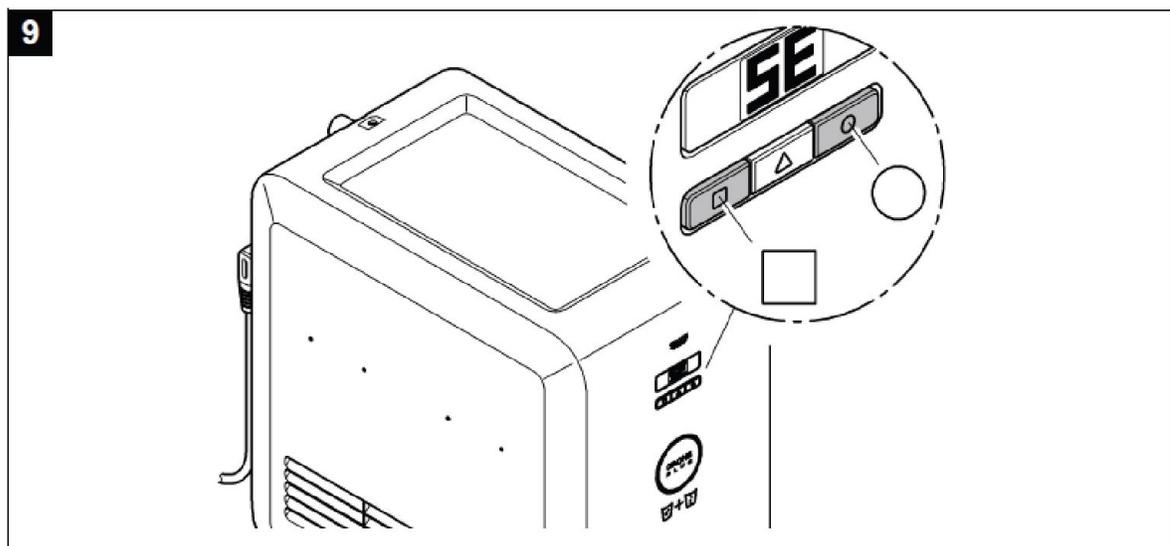
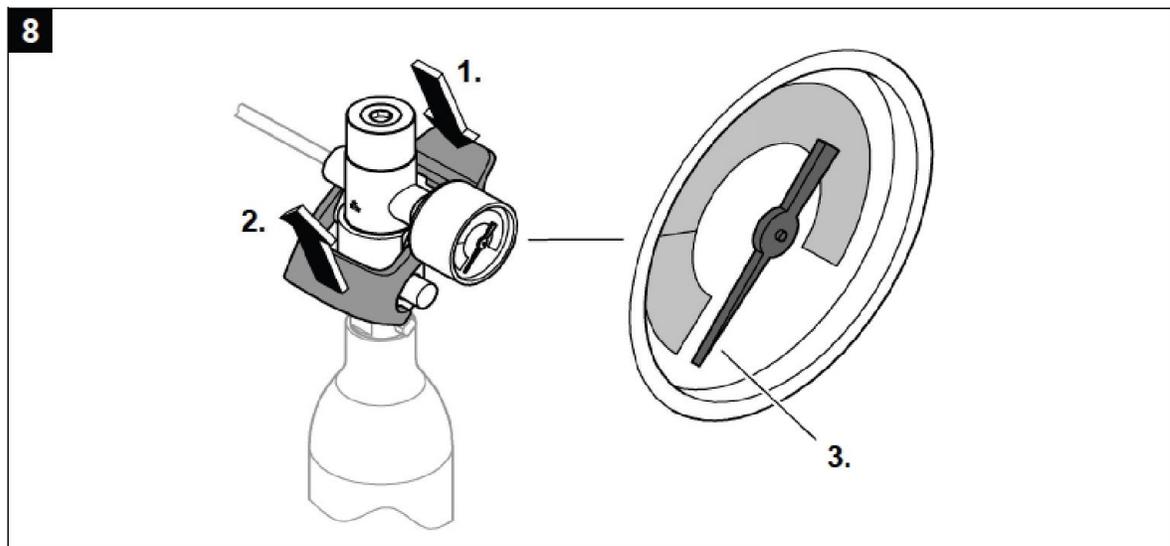
- 3 Sanitize filter-head, contact time 1 minute (ensure wet surface for the whole contact time, possibly re-apply), after pre-cleaning visibly soiled surfaces, with KS AQVA Sanitizer .
- 4 Sanitize adapter, contact time 1 minute (ensure wet surface for the whole contact time, possibly re-apply), after pre-cleaning visibly soiled surfaces, with KS AQVA Sanitizer.
- 5 Pull off spray head
- 6 Install adapter to filter head and screw in the KS AQVA Sanitizer cartridge



Pre-cleaning, sanitizing, rinsing - Step 8-9 (follow instruction of the unit manufacturer)

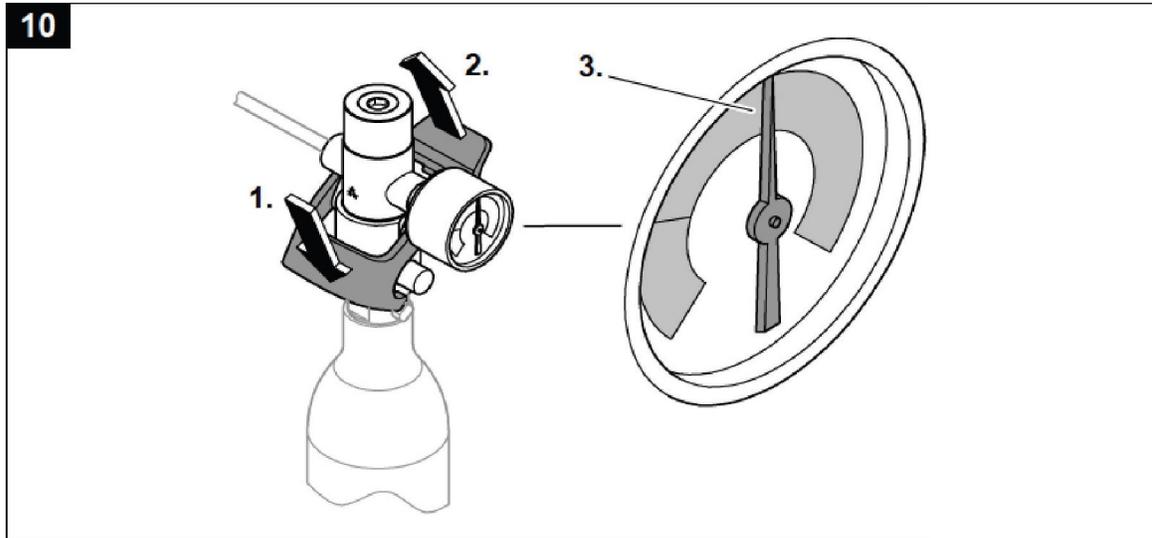
- 8 Depressurise the carbon dioxide cylinder
- 9 Start pre-cleaning, sanitizing and rinsing mode
 - 1 Press and hold the □ ○ buttons at the cooler simultaneously until **SE** flashes in the display.
 - 2 Release the □ ○ buttons and press □ until **SE** lights up continuously.
 - 3 Release the □ button, **C-** flashes.
 - 4 Press and hold the □ button until **C-** lights up continuously.
 - 5 Release the □ button, **CL** lights up for max. 20 seconds.

Pre-cleaning, sanitizing and rinsing mode mode is started, the cooler will be flushed and filled. After max. 40 minutes, the pre-cleaning, sanitizing and rinsing process is finished. The display in the cooler changes to the remaining filter capacity in percent.



End process - Step 10

- 10 Re-establish the pressure supply to the carbon dioxide cylinder.
Remove KS AQVA Sanitizer cartridge in reverse order, see FIG.7

**NOTE!**

Inserting a new filter cartridge, see the technical product information for the filter cartridge.
See the technical information of the cooler, a reset may be required each time the filter is changed.

**IMPORTANT!**

Enter all conducted cleaning activities immediately in the respective documentation!



Standard Operation Procedure Treatment of Beer Lines with KS®AQVA

1 Introduction & Materials

Introduction:

Regular cleaning of your beer lines, faucet, and keg coupler is crucial for maintaining a sanitary environment, this regular cleaning assures that impurities do not have the opportunity to reach levels that might cause off-flavours and shorten the shelf life of your beer. Line cleaning with the proper equipment and chemicals will also eliminate the build-up of calcium oxalate or "beer stone", a mineral deposit that builds up when dispensing draft beer. If left unchecked, these beer stones can flake off into your beer causing an off taste, as well as creating an unsanitary surface that can harbor impurities.

In commercial environments, line cleaning should be performed at least once every two weeks.

Materials:

Art. No.	KS®AQVA Products	No.
	KS®AQVA Sanitizer, Spray Bottle 400 ml	1
	KS®AQVA Cleaning solution, BiB 5000 ml	1

Art. No.	Equipment	No.
-----	Beer line cleaning unit incl. connection tubes	1
-----	Ultrasonic cleaning bath	1
-----	Cleaning Bucket	1
-----	Loop Connector John Guest	1
-----	Alkaline Cleaner (Sodium Hydroxide)	1

DIRECTIONS FOR USE – IMPORTANT NOTICE

IMPORTANT!

In the following application two products are used:

- KS AQVA Sanitizer, Spray bottle 400 ml/13.5 fl.oz

DIRECTIONS FOR USE: KS AQVA Sanitizer may be used as a food-contact sanitizing spray for use on hard nonporous surfaces of water dispensing units, nozzles and diffusers of beverage towers, Syrup BiB-connectors, ice cube makers, keg-adapters and taps of beer dispensing units

To sanitize, spray product on surface. A 1 minute contact time is required.

Reapply as necessary to ensure that the surface remains wet for entire contact time.

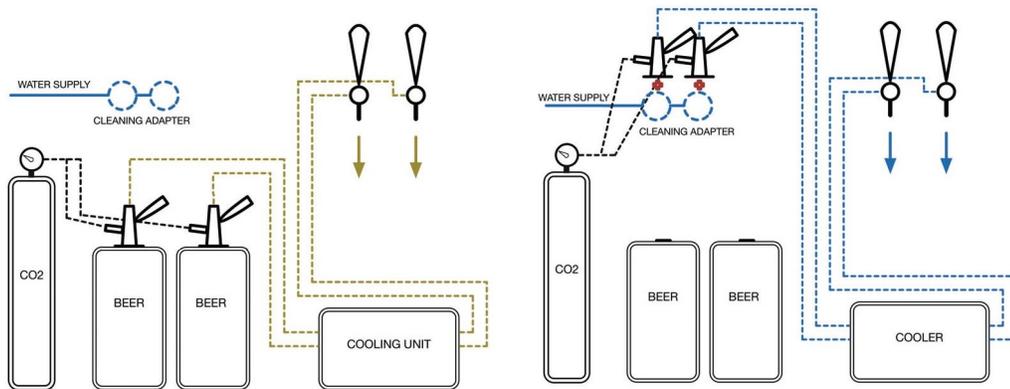
- KS AQVA Cleaning solution, BiB 5000 ml / 169 fl.oz

DIRECTIONS FOR USE: KS AQVA Cleaning solution may be used as a cleaning agent for water dispensing units, soft-drinking beverage systems, syrup lines, nozzles and diffusers of beverage towers, ice cube makers, and beer lines.

To clean, mix KS AQVA with clean potable water at a ratio of 1:2. Allow the mixture to sit and absorb for 1 hour to thoroughly clean the system.



2 Normal Operation & „Stand-by“ Modus

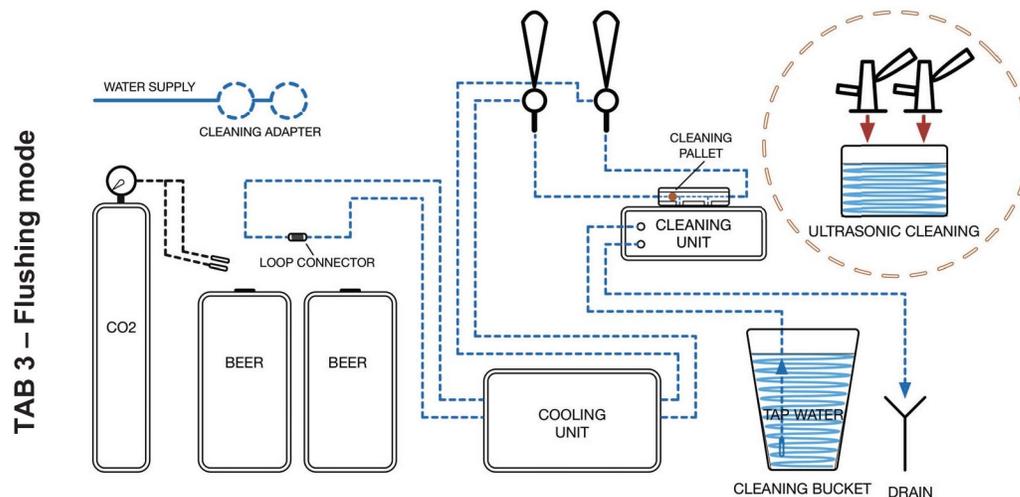


TAB 1 - Normal operation mode
of beer dispensing unit

TAB 2 - “Stand-by” mode
all lines flushed and filled with tap water
during the rest periods of the operation site

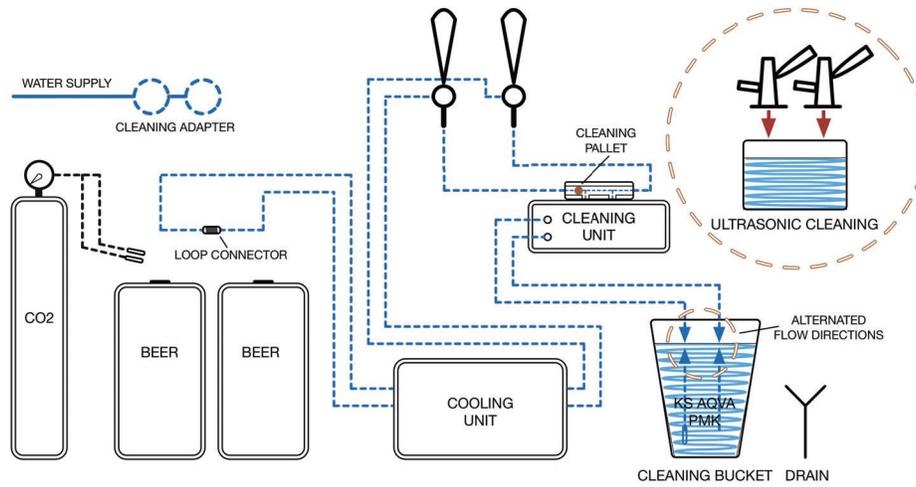
3 Cleaning of Beer Lines, sanitizing of couplings

- 1 Release the keg-adapter from the keg, close CO₂, pull out the beer- and CO₂-pipings due to loosening the JG quick adapters.
- 2 Connect the beer-lines in order to create a loop with an appropriate adapter.
- 3 Dismount the keg adapter and put the pieces in a prepared Ultrasonic bath with cleaning solution, composed of KS®AQVA Cleaning solution diluted 1:2 with water
- 4 Attack the cleaning unit to the beer taps
- 5 Fill cleaning bucket with potable water
- 6 Make first flushing with tap water for 2-3 min., discharging the water after the passage through the connected beer lines



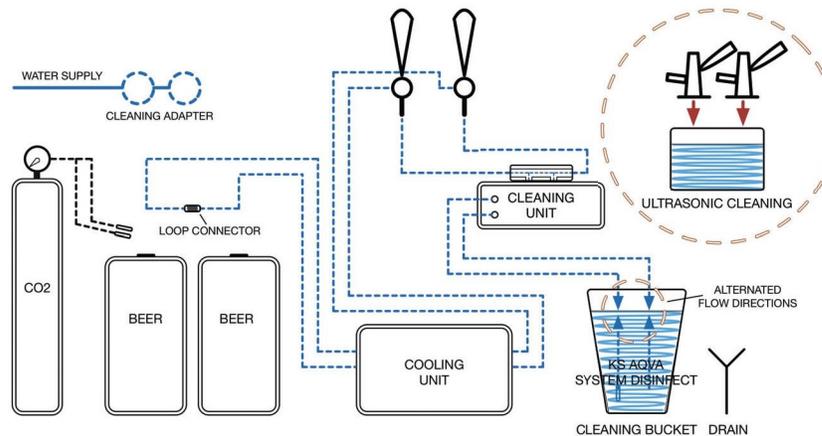
- 7 Fill the bucket with the alkaline cleaner (see instructions of the cleaner) , dispose the drain line of the cleaning unit in the bucket and clean in alternated directions **with** the cleaning sponge for 10 min.

TAB 4 – Alkaline cleaning mode



- 9 Intermediate flushing after alkaline cleaning for 2-3 min. – see **TAB 2**
- 10 Fill the bucket with KS®AQVA Cleaning solution from the BiB – dilution 1:2 with tap water, dispose the drain line of the cleaning unit in the bucket and clean in alternated directions **without** the cleaning sponge for 5 min.

TAB 5 – Cleaning mode



- 11 Final flushing after alkaline cleaning for 2-3 min. – see **TAB 2**
- 12 Reassemble the dismantled keg-adapter, dismantle loop connector and connections from cleaning unit to the taps, reconnect beer line and CO₂ tube to the keg adapter
- 13 After pre-cleaning visibly soiled surfaces, spray and sanitize, contact time 1 min., the keg adapter and counter-plate on the keg with KS®AQVA Sanitizer, reconnect the keg with the keg adapter, regulate, if necessary, the CO₂ pressure and put the unit in normal operation, or, if required, in “stand-by” mode
- 14 After pre-cleaning visibly soiled surfaces, spray and sanitize, contact time 1 min., the exterior of the taps with KS®AQVA Sanitizer.