



IFU 013-US
AerisGUARD BEERLINE & BREWERY CLEANER

Document Type / Category	Instructions For Use (IFU)
Document Number, Issue, Title	IFU 013-US Rev02 - AerisGUARD Beerline & Brewery Cleaner

1. PURPOSE

THE PURPOSE OF THIS PROCEDURE IS TO DIGEST AND DETACH INANIMATE ORGANIC DEPOSITS FROM BEER LINES AND FITTINGS.

- It is well known that the presence of inanimate organic debris makes it a lot harder to clean beer lines.
- It has been clearly demonstrated that high levels of inanimate organic debris affect the taste of beer.
- Aeris has demonstrated in extensive laboratory and field validation that the use of a combination of the appropriate enzymes enables the complete digestion of all inanimate organic debris deposited on the surfaces of the beer line and its fittings.
- The digested inanimate organic debris released during the enzymatic treatment is then removed by flushing the beer line with water at the completion of the cleaning.
- Beer taps and other components removed during the cleaning process should be soaked in the diluted product to ensure complete cleaning and removal of the inanimate organic debris from the system.

This IFU covers the steps and actions that need to be taken in the use of AerisGUARD BEERLINE & BREWERY CLEANER.

All Aeris Environmental personnel, sub-contractors and certified applicators are expected to take an active role in establishing, implementing and maintaining this Procedure in line with this IFU according to their role and responsibility.

The purpose of acting in accordance with this IFU is to have an uninterrupted, smooth process that ensures that correct process and use of the products are followed. This IFU shall also be part of Aeris' continuous improvement initiative.

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2. PROCEDURE DESCRIPTION AND PROCESS FLOW

All works to be carried out with AerisGUARD BEERLINE & BREWERY CLEANER should be performed in compliance with relevant national Health, Safety and Environmental standards and regulations. Before commencing use of the product consult this IFU, the SDS, your work order and / or the job specification.

If the warnings and instructions are not fully understood or compliance with all safety instructions is not possible contact the manufacturer for clarification, do not use the product.

The steps in this procedure are as follows:

1. Preparation
 - a. Product Handling & Packaging
 - b. Apparatus & Equipment Required
 - c. Product Dilution and Application Rates
 - d. PPE and OH&S Requirements
2. Setup
3. Application Process
4. Clean up Process

3. PROCEDURE

1. Preparation

a. Product Handling & Packaging

- Consult the product Safety Data Sheet (SDS) prior to use. Always store the product out of direct sunlight and not exposed to hot environments for extended periods of time.
- The product is available in 1 Gallon & 1 Quart units & has a shelf life of 36 months.

b. Apparatus & Equipment Required

- Measuring vessel
- A pump for delivery through beer lines. (Maxi-Vac pump JS300 or JS350 recommended)

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c. Product Dilution and Application Rates

- The dilution rate of the AerisGUARD BEERLINE & BREWERY CLEANER is 1 per 20 fl oz (50mL perlitre) for the initial cleaning cycle and then 1 per 33.8 fl oz (30mL per litre) every two weeks thereafter.
- Each site will vary on how many litres each system holds and solution should be mixed accordingly.

d. PPE and OH&S Requirements

- Protective gloves should be worn.
- Safety eyewear should be worn.
- Care should be taken not to breathe the spray or have product splash around mouth/face.

SAFETY PRECAUTIONS:

Should any AerisGUARD BEERLINE & BREWERY CLEANER splash onto the skin or clothing it should be washed off promptly with water and clothes washed before wearing again. If irritation occurs seek medical advice.

- It is recommended that gloves, safety goggles and a respiratory mask are worn when handling AerisGUARD BEERLINE & BREWERY CLEANER. Please see product label for other safety information.
- Follow all OH&S or equivalent standards regarding personal protection and site-specific requirements.

4. Setup

Before addition of the AerisGUARD BEERLINE & BREWERY CLEANER

- The total volume of all beer lines must be calculated to ensure the correct volumes of diluted product are prepared.
- All beer should be flushed from the lines.
- Where a flow back system is in place the beer needs to be removed from the lines.

5. Procedure

Addition of the enzymatic cleaner

Make an addition of the BEERLINE & BREWERY CLEANER concentrate at a rate of approximately 1 fl oz to 20 – 30 fl oz (30mL - 50mL: 1 Litre) of hot water 104°F to 158°F (40°C to 70°C).

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The beer lines having the product added need to be in an open position before the pump is engaged to allow the product to fill the lines. The valve of the fob trap may need to open to vent the trapped air to fill the fob trap.

Once the product has begun to flow from the tap, the tap can be closed as the product has filled the line. This process is carried out on all lines and the exposure time should be monitored to ensure the exposure time recommended is met. The exposure time commences once all lines are flooded with product.

Allow the AerisGUARD BEERLINE & BREWERY CLEANER to circulate or remain static in the lines for at least 30 minutes. If performing an initial clean with BEERLINE & BREWERY CLEANER and large amounts of inanimate organic debris are seen in the rinse water, a repeat clean is recommended.

For systems where a recirculation cleaning system is in place the 30 minutes cleaning time still applies.

Note: - As a rule of thumb the longer the digestion time, the better, for up to 1 hour. BEERLINE & BREWERY CLEANER cannot cause damage to the cleaning circuit and associated equipment.

At the completion of the re-circulating/cleaning cycle, the taps and other pieces of equipment that have been soaking in the product should be physically cleaned and thoroughly rinsed before being reassembled.

Drain ALL cleaning solution from the entire circuit.

6. AFTER ENZYMATIC CLEANING

Flush the entire system with water.

If foam is still present in the rinse water at the completion a second rinse is then required.

At completion of the rinsing the lines are now ready for the beer to be placed back into the lines.

7. Clean Up

Ensure all traces of work done are removed from site and the area where the work is carried out is left as it was found.

Whilst all care has been taken in the preparation of this document it is supplied as a guide only and does not replace local, state or federal government requirements relating to the care and maintenance of Beer Lines.

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