

Ships Service

W Wilhelmsen

Gamazyme sewage treatment aces the test with customers after just 2 months



Our Unitor[™] Gamazyme sewage treatment products have been a cornerstone of our Biochemicals cleaning range; but don't just take our word for it – our customers have bought over 11 million KG of our Gamazyme products since 2009.



Gamazyme range: over 11M KG sold since 2009

Common oversight with sewage treatment products in the industry

With sewage treatment, it is very common to overlook the types of cleaning chemicals your fleet uses. Choosing the wrong chemicals, however, can actually cause more harm than good in the long run. For instance, when overly harsh chemicals are applied to your sewage system, they can kill the naturally occurring bacteria which is critical to the optimal performance of a sewage treatment plant.

In addition, ship-owners or managers may have to deal with blocked grey and black water pipes which are a problem for ships due to their designs requiring long horizontal runs. The horizontal pipes do not aid gravitational flow and as the vessel rolls and pitches, soil lines will run backwards. These pipes accumulate soil, progressively reducing the pipe bore until blockage occurs. It is then very difficult for the crew to locate the exact position of the blockage. When located; the pipe must be opened for clearance whereupon noxious waste erupts in an uncontrollable flow.





Our Unitor™ Gamazyme range resolves this issue by promoting a positive bacteria culture, being probiotic cleaners, they are specifically created for safe and effective cleaning of toilets, drain lines and grease traps, odour control, and septic and waste treatment on board ships.

Case study: The problems our customers were facing with their sewage system

- Clogging issues due to scaling in sewage piping.
- Foaming from the tank vent including presence of foul odours in the toilets.

The products tested – Gamazyme Biological Toilet Cleaner and Gamazyme Toilet Descaler

- Gamazyme products were selected based on recommendations from cruise customers who were using Gamazyme products.
 - ♦ Gamazyme BTC Gamazyme Biological Toilet Cleaner is a unique biological active liquid formulation containing specialised bacterial strains, biodegradable low foaming chemical cleaners and anti-foam agents.
 - ◊ Gamazyme TDS Gamazyme Toilet Descaler is used for descaling toilet bowls, toilet systems, drains and pipes.



Testing method used

- The vessel was provided with enough material to clean for 2 months.
- Prior to the use of the products, selected sections of piping were opened and photographed so that a comparison could be made after 2 months.

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- Significant scaling is visible:
 - $\diamond \quad \text{isolation valve in forward pump room} \\$



pipe section in after pump room



• After the survey of the piping section, a meeting was held with the crew and the product's functionality and directions for use were explained.

Customers' verdict - dramatic improvements in just 2 months

- The closeout inspection was conducted after the chemicals had been used for 2 months.
- The same selected piping sections were opened for comparison.

♦ Forward pump room - The piping was significantly cleaner with only 1/16" layer of scale at the flange remaining while the rest of the piping was cleaned to bare metal.





Before

- After
- ♦ After pump room The pipe that had only 1/2" of clear opening left due to scaling now had approximately 1/4" deposit of scale left. The other section of pipe was cleaned to bare metal.



Before

- After
- Also inspected was the flapper assembly for one of the ejectors. The flapper and seat did not have any scale build up at all.
- ◊ For the aft collection manifold, the examiner noticed no odor coming from it despite being only six inches away from the opening. As for the foaming issue, it was reported that all instances of foaming stopped completely as soon as the vessel began using the cleaners.

Customer quote

"As evident from the photos above, the Unitor chemicals worked as advertised. The scaling was eliminated in all but the most extreme instance and in that case it was significantly reduced, the periodic 'burping' of the 'bluegreen ooze' stopped immediately and the normal odors were significantly reduced where the products were used as directed. The exclusive use of these two products to clean the toilets and urinals will eliminate the class wide foaming problem and eliminate the need for any future system wide hydroblasting or chemical flushing."

WSS Product Manager Joyce Tan says, "When it comes to sewage systems on board, prevention is better than cure. Apart from ensuring that the sewage treatment plant is working optimally, shipowners also need to ensure that grey and black water pipes are free of any scale and deposits as that can lead to blockages and, in worse cases, the only option is to cut the pipes open. With Wilhelmsen's Gamazyme range which consists of probiotic cleaners, you get safe yet powerful products to ensure you never have to worry about sewage problems."

It gets even easier with the whole Biomax Package

Gamazyme BTC and TDS are part of our new Biomax Package, which we have created to give your vessel the complete probiotic protection for the sewage system.



Biomax Package contains Gamazyme probiotic cleaners

With these products, which include our popular Gamazyme 700FN and Gamazyme DPC, you can promote good cleaning practices on your fleet with no harsh chemicals that are detrimental to the sewage treatment plant. Each Biomax package can also last for approx. 6 months so you can have an easier time controlling budget and reducing the frequency of purchase while achieving high quality results.



Easy to order and store products that go together



Promotes good practice, no usage of harsh chemicals that are detrimental

to the sewage treatment plant Easier budget control: package can last

for a long time. Therefore, avoid the cost and time spent on frequent re-ordering

Safer for the environment and human health compared to chemical products

Four different products in the pack which should last for approx. 6 months for a vessel with 15-20 crew

Product no.	Product	Packaging	Biomax
743146	Gamazyme TDS 5 KG	5 kg carton	4 cartons (4 x 5 kg)
589945	Gamazyme BTC 12 X 1 Ltr	12 X 1 L box	2 boxes (2 x 12 X 1 L)
587055	Gamazyme DPC 4.0 KG	4 kg bucket	2 buckets (2 x 4 kg)
571711	Gamazyme 700 FN 12 KG	12 kg bucket	1 bucket (12 kg)

At Wilhelmsen Ships Service, we are dedicated to delivering products and services that are technically superior while helping to protect the marine ecosystem. Reach out today for more information on our Unitor™ Gamazyme range and Biomax package.

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