



GNC MARINE

PRODUCT DATA SHEET

GT 20

GT 20

Liquid multi-strain bacterial solution specifically formulated to degrade fats, oils and greases (FOG's) and other types of food waste in the demanding environments of galley scuppers, drain lines, grease traps grey water tanks and grease interceptors, reducing build-up and preventing odours

Product Description

The *Bacillus* strains used in GT 20 are selected specifically for their ability to produce a cascade of extra-cellular enzymes to rapidly degrade a wide variety of food wastes, including fats, oil and grease, protein, starch and fibre. These strains that have been extensively studied by our fermentation partner to prove they are able to degrade a wide range of fats, oils and grease materials all the way to carbon dioxide and water. The capabilities of these strains have also been tested under a broad range of environmental conditions to ensure they function in the field and not just in the laboratory. A further feature of the GT 20 strains are their ability to form biofilms - microbial communities consisting of billions of bacteria within the scuppers, pipe work and grease trap, which are highly resistant to occasional shocks of low or high pH, temperature or chemicals.

The formulation also comprises a bio-based surfactant package derived from renewable sources to compliment the biosurfactant that the bacteria also produce. Together the surfactant action softens solid fats making them readily available to the bacteria, encouraging biodegradation without emulsification.

These many features of GT 20 mean that it is the most effective biological product specifically designed for the treatment of fats, oils and grease (FOG's) build-up in marine galleys. GT 20 will also help to promote good biological action in grey and black water tanks.

Application Area

Galley waste can contain high levels of FOG's that build up within the scuppers and other drainage systems within the galley pipework going to sewage plants or holding tanks. On some vessels where extensive food preparation occurs, grease traps or interceptors may have been fitted within the galley to try to capture and control fatty materials.

In the scuppers and grease traps, fat deposits can lead to slow water flows and even localised flooding or back-ups, these build-ups also can result in foul odours due to the slow biological breakdown of fats and other food residues under anaerobic conditions. These anaerobic bacteria break down fat and other waste materials, producing volatile fatty acids, which in turn lead to persistent and characteristic foul odour problems.

Designed to biodegrade FOG's in galley waste GT 20 is ideal for use in all of these areas.

GT 20 is also effective on the body fats and soaps commonly found in the wastepipes of baths, sinks, showers and laundries, so is also ideal for grey water originating from cabins and accommodation areas.

Features and Benefits

Features	<ul style="list-style-type: none">• Application-specific bacteria strains with high enzyme production for rapid breakdown of food wastes.• Strains are proven to degrade wide range of fats, oils and grease all the way to carbon dioxide and water.• Includes bio-based chemistry to enhance the action of the bacteria• Very high bacteria specification for maximum effectiveness in this tough environment.• Product bacteria form a biofilm on the inside of the pipes which offers protection against extremes of temperature and Ph.• Effective in a wide range of pH and temperature environments.• Designed for both manual and automatic dosing so problem is solved with minimum engineer input.• Long product shelf-life.
Benefits	<ul style="list-style-type: none">• Reduces the requirement and frequency of mechanical treatment to unblock drains or empty grease traps due to grease build-up• Provides rapid control of malodours from the drains within the galley• Non-caustic and non-corrosive• If grey water is being treated in a sewage treatment plant, grease is partially degraded by the time it reaches the plant, reducing the potential for system overload

Directions for Use

Automatic Dosing

Ideal application is 150ml to 200ml daily, automatically fed into system via a pre-programmed peristaltic pump.

Pump should be located close to the main source of the fats: this may be a manual pot washing sink or rinsing station within the galley. The ideal injection point should be just after the U-bend in the waste pipe.

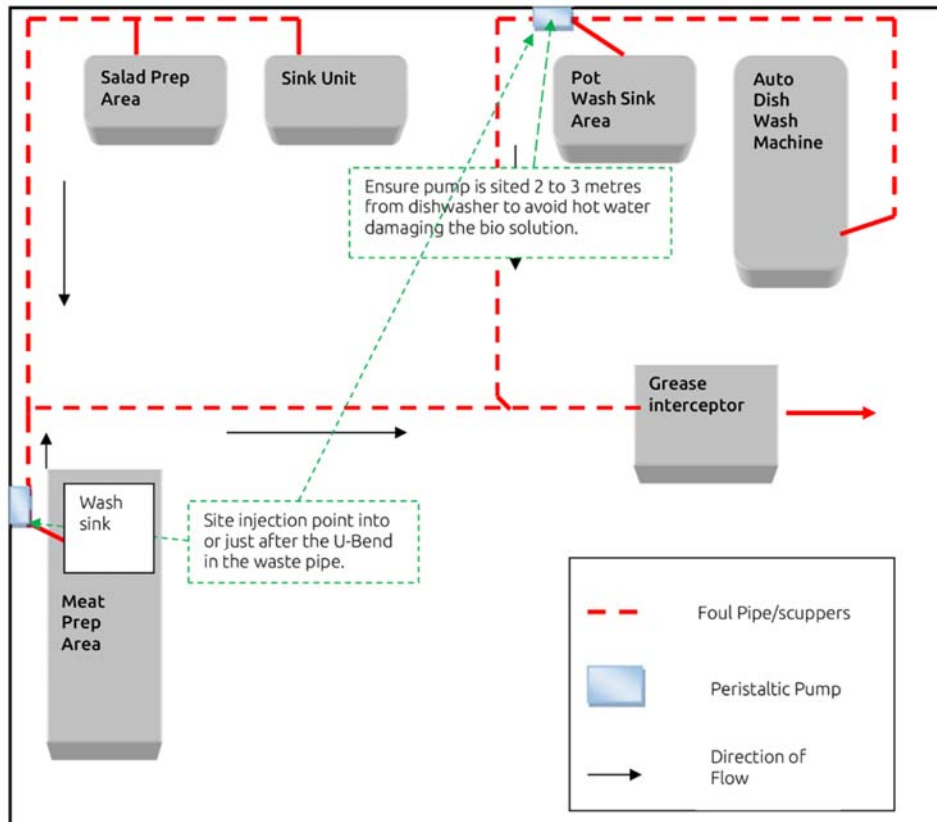
Do not site injection point too close to a dishwasher waste outlet as the high temperature and high pH dishwasher discharge chemicals as these will have a negative effect on the biological action on GT 20.

Dosing should be timed to occur during a period when the galley is largely inactive and not directly after a clean down.

Manual Dosing

Pour 150ml into 3 litres of clean water, mix well and pour down scuppers and waste pipes daily.

Figure 1: Schematic diagram of a galley drain system and grease trap with GNC Marine GT 20 Liquid Product installation.



NB. The above is given as a guide only, on-board catering equipment etc. may well determine where any injection pump or dispenser can be sited safely.

Packaging

2x5L case