

## TECHNICAL SAFETY DATA SHEET

### HD88 - BIO CLEANING SOLUTIONS - Blue Mac Portable Toilet Fluid

#### Section 1. Product Description and Picture

**Proprietary blend natural organic formulation for portable toilet systems (formaldehyde/glutaraldehyde free)**

Blue Mac Portable Toilet Fluid is designed for use in portable toilets including:

- Construction site toilets
- Caravans, trains and busses
- Marine vessels
- VIP portable mobile toilets
- Underground portable toilet in mines
- Events (music, sport)

A unique product to accelerate the degradation of organic matter and provides exceptional bacteriostatic and disinfectant properties in these applications. The harnessing of nature's own technologies and importantly moving away from harsh, dangerous and health risk chemicals such as formaldehyde derivatives. Green Worx Cleaning Solutions offers a natural organic biological solution that is eco-friendly, safe and holds no health risk for both the user of a toilet or the service agent to portable toilets.

**Blue Mac Portable Toilet Fluid is a sanitation solution that demonstrates superior performance. The toilet fluid exhibits a broad range of degradation capabilities needed for improving septic and waste degradation, cleaning, odour control and bacteriostatic effects of commonly found bacteria in solid waste.**

Blue Mac Portable Toilet Fluid produces rapid degradation of waste in septic systems and cleans surfaces. This disinfectant, bacteriostatic solution is the next generation technology in sanitation with degradation capability superior to the present commercially available formaldehyde blends. It is designed to provide exceptional performance keeping portable toilets hygienic, clean and the system trouble free:

- The proprietary blend, with natural organic food source as the active ingredient, improves system stability and enjoys proven bacteriostatic efficacy against E.coli, S.typhi and P. Vulgaris - the most common and harmful bacteria found in portable toilets.
- The superior surfactant added to the proprietary blend in 1000 ppm is an effective disinfectant and reduces the frequency of cleaning the holding tank.
- Provides long-term odour control by containing the organics that cause bad odour, eliminating odours due to organic build-up.

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<b>Benefits</b>	<ul style="list-style-type: none"> <li>• Septic and waste treatment – Blue Mac Portable Toilet Fluid maintains effective activity in septic systems. Eliminates odours caused by incomplete digestion of malodorous volatile fatty acids.</li> <li>• Odour controller – provides long-term odour control, containing the organics that cause odours and prevents the return of odour-causing compounds for up to 5 – 7 days prior to emptying.</li> <li>• Wastewater Treatment Plant – Independent laboratory studies have proven that Blue Mac Portable Toilet Fluid has exceptional bacteriostatic performance against E. coli and Total Coliforms and has demonstrated effective antiseptic cleaning activity in septic systems (waste water sludge). The active ingredient first has a negative and sterilised impact on the bacteriological growth in the toilet bucket and after mixing into the Wastewater Treatment Plant it reacts as a carbon source to the microorganism for biological break down.</li> </ul>
<b>Features</b>	<ul style="list-style-type: none"> <li>• Proven bacteriostatic efficacy against E.coli, S.typhi and P. Vulgaris as per SABS SANS test method 5730</li> <li>• A stable propriety blend of natural organic food source that is environmentally friendly and totally biodegradable (independent laboratory analysis)</li> <li>• Provides a wide range of degradation capabilities</li> <li>• Ability to work under aerobic and anaerobic conditions</li> <li>• An effective antiseptic cleaning activity in wastewater sludge</li> </ul>

## Section 3. Recommended Application

Feed Rates 2 X Concentrated Formulation

**Portable toilet system:**

System	Frequency	Notes	Dosing
Portable toilets RVs, busses, marine, aviation and bucket systems	Add after every emptying	Maximum duration 5 – 7 days	Deposit ½ litre into holding tank with 20 litres water
Portable toilet maintenance	Ongoing		Deposit ½ litre into holding tank with 20 litres water

Blue Mac Portable Toilet Fluid is available in 25 litre containers.

**Product comparison**

Conventional Formaldehyde Products	BLUE MAC Portable Toilet Fluid
Formaldehyde is a VOC which masks the foul odour	Will remove the organics that cause the odour
As a VOC formaldehyde is overpowering and often causes breathing problems, shortness of breath and bring tears to your eyes when in the confined space of a portable toilet	Has a pleasant fresh fragrance that provides a refreshing environment to be in.
Within a short while the fragrance combined with effluent odour makes it unbearable for visitors to the portable toilet	Leaves the toilet smelling fresh and clean for upto 7 days
Formaldehyde has a short lifespan	Will remain effective for the duration required in a portable toilet 5 – 7 days prior to emptying (total days to emptying as specified by municipal regulations)
Formaldehyde is inexpensive; however, this cost can be increased due to its short lifespan and being ineffectual when diluted more than recommended	Cost per litre is the same as that of formaldehyde yet is more cost effective
Average usage is 1 liter per emptying	Same
Formaldehyde is considered a health risk in many developed countries and by the World Health Organization (well documented) It is also banned in most developed countries	Natural, organic food source combined with a surfactant, fresh fragrance and food colorant
Formaldehyde is a harsh chemical that will destroy the natural bacteria in healthy sewerage systems	Enhances eco systems
Not been proven by local suppliers of Formaldehyde	Proven bacteriostatic efficacy against E-coli, S.typhi and P. Vulgaris as per SABS SANS test method 5730
Formaldehyde is at best a masking agent and a definitive VOC	Has the ability to work under aerobic and anaerobic conditions
Formaldehyde cannot make the same claims as it is not a Bio Cleaning Solution	Bio Cleaning Solution
Formaldehyde has been used for years with no SABS standard	A new innovation which means that even though formaldehyde has been used for a long time, this is the right product to use

**HYGIENE DISPOSABLES**

1 Bushbuck Close - Unit 2, Corporate Park - South, Midrand  
Tel: +2711 314 0714 • E-mail: sales@hyg.co.za • Web: www.hyg.co.za