

ADVANCED BIOLOGICAL POWDER FORMULATIONS

## Municipal DeFOG<sup>TM</sup>

a highly concentrated, specialized blend of application-specific bacterial cultures selected to degrade municipal, food processing and high fats, oils and grease waste

#### overview

Municipal DeFOG™ offers an extremely effective solution for the constant challenge of suspended solids, BOD's, COD's, sludge, odors, organic buildup and high levels of fats, oils and greases (FOG) in wastewater treatment applications.

The highly concentrated, optimized blend of application-specific bacteria in Municipal DeFOG<sup>TM</sup> has been selected for its ability to degrade common municipal and food processing waste and, in particular, high levels of FOG.

## applications

- municipal wastewater treatment plants
- food and beverage industries
- restaurant grease traps
- institutional kitchens

## advantages of Municipal DeFOGTM

optimized proprietary bacterial consortium degrades a broader spectrum of substrates

wide range of carriers available, including ecobenign<sup>TM</sup> options

enhances BOD/COD/TSS removal reduces

hydrogen sulfide

reduces sludge build-up

increases system efficiency

eliminates odors at source

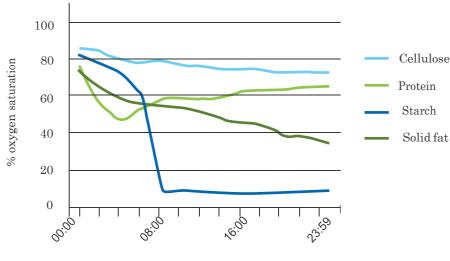
highly effective at degradation of FOG buildup

manufactured under strict quality control standards to ensure high quality and purity



## product testing

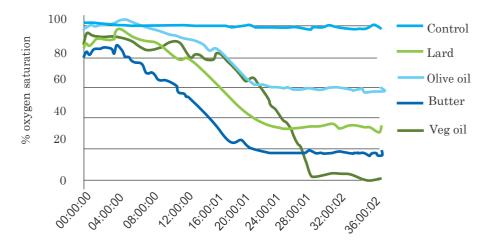
### All around biodegradation ability of Municipal $DeFOG^{TM}$



Time (hours:minutes)

The above graph shows the all-around degradation ability of Municipal DeFOGTM on different substrates.

#### FOG degradation by Municipal DeFOGTM



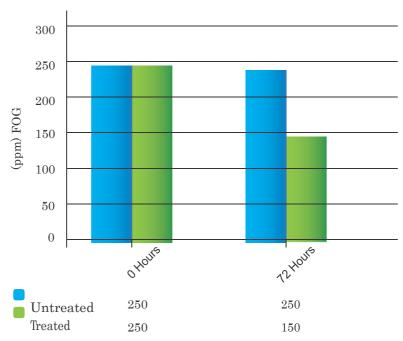
Time (hours:minutes:seconds)

The above graph shows the degradation of different fats, oils and greases by Municipal  $DeFOG^{TM}$ . As the substrates are degraded, the % oxygen saturation decreases.



# product testing

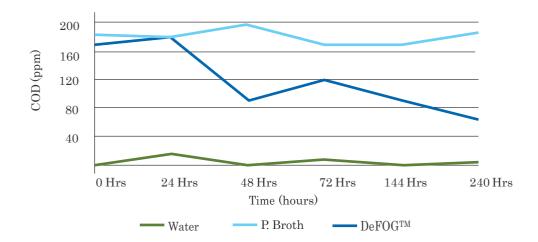
Degradation of canola oil with Pseudomonas putida



ppm FOG measured using InfraCal® TOG/TPH Analyzer (Model HATR-T2), by Wilks Enterprise, Inc.

This represents a 40% DEGRADATION OF FOG IN 72 HOURS

### Municipal DeFOGTM in protein broth



This represents an AVERAGE OF 65% REDUCTION IN THE COD IN 240 HOURS



# technical specifications for Municipal $DeFOG^{TM}$

targeted compounds	proteins, starches, fats, oils and greases, cellulosic material, carbohydrates and odors	
bacterial count	5.00e+09 cfu/g bacillus spores + non-pathogenic pseudomonas	
bacterial type	bacillus spore blend + non-pathogenic pseudomonas	
formula properties	tan, free flowing powder with earthy odor wheat bran/sodium sulfate carrier (available in Canadian approved (CB) formulation)	
performance properties	effective pH range: 4.0-11.0	temperature range: 45-120°F (5-50°C)
packaging	25lb and 50lb containers  also available in 2oz, 4oz, 8oz and 16oz bio-pouches  products may be blended in different carriers but order size minimums may apply - check with us for specific availability	

### **CONTACT US**

Bacteria Direct is a web-based industrial strength bacteria supplier with warehousing in Colorado and Georgia.

For all inquiries: t: (970) 573-6842 e: info@bacteriadirect.com w: www.bacteriadirect.com