

# MICROCAT<sup>®</sup>-DF213 Biocompatible Defoamer for Wastewater Plants

# Description

**MICROCAT-DF213** Defoamer is a synthetic biocompatible organo-silicone liquid for controlling chemically generated foams (e.g, surfactants) in wastewater plants. It is formulated for aeration tanks and sludge digesters to suppress foam without inhibition of the biomass and other negative side effects associated with conventional defoamers. **MICROCAT – DF213** does not contain mineral oil, nitrogen or phosphorus compounds. As such it is compatible with the use of MICROCAT microbial – enzyme formulations.

#### Applications

At times anaerobic and aerobic microbial metabolism can result in persistent foams resulting from the presence of both natural and synthetic surface active agents such as detergents, cleaning compounds, soaps, etc.

Some foams can at times attain a "structural" character. **MICROCAT-DF213** can help, especially when used in conjunction with other **MICROCAT** products for controlling incoming greases and fats in the collection system. Such compounds and their metabolites tend to be surface active in their own right.



Significant cost reductions versus conventional chemical foam treatments are available by combining MICROCAT - DF213 with other MICROCAT formulations to create a "green" solution to a foaming problem.

#### Product Characteristics

Appearance	White, opaque viscous liquid
Contents	Synthetic, 100% active non-settleable organics
Shelf Life	One Year; Store above 50°F to avoid freezing.
Packaging	5/55 gallon (18.9 / 208.2 L) plastic drums, 275 gallon (1.04 m3) totes

# **Application Programs**

In general, **MICROCAT-DF213** is metered continuously into the foam source. For anaerobic sludge digestion systems, add the product into the heat exchange loop. For aerobic sludge digestion systems add the product to the liquid surface. Add **MICROCAT – DF213** at a rate of 3 to 6 gallons per million gallons of digester volume. For "standing" foams of considerable depth increase the dose initially until the foam layer subsides and then reduce the application rate.

For aerobic wastewater systems add 3-15 ppm based on the forward flow rate. Add to the influent before the splitter box or to the sludge recycle line. If the foam blanket is greater than 3-4 inches, increase the application rate up to as high as 60 ppm until the layer subsides. Dosages as low as 0.5 - 5.0 ppm may control foam after initial foam collapse. Lower dosage slowly to obtain minimum required for control. The product can also be added batch-wise. Your Bioscience, Inc. Technical Representative will provide you with a custom-tailored application program to fit your specific needs.

#### **Application Equipment**

Bioscience supplies cost-effective, metering equipment specially designed to ensure the efficacy of your foam control program. Contact your Bioscience, Inc. Technical Representative for a complete site survey and detailed equipment recommendations.

# Storage and Handling

Storage	$55^{\circ}$ - $120^{\circ}$ F (13° - 49° C). Store indoors at room temperature.
Handling	No special handling required. Dispose of in accord with all local, state and federal requirements. If accidental skin contact occurs wash affected area with soap and water. Do not ingest. Non-toxic, non- pathogenic, harmless to aquatic life.

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