

# **MICROCAT®-PR**

#### Hydrocarbon Biodegrader for Petroleum Refineries and Petrochemical Plants



# Description

**MICROCAT-PR** is a specialty blend of preselected, adapted microorganisms for use in biological treatment plants receiving wastes from petroleum refining and related chemical operations. **MICROCAT-PR** contains a combination of aerobes and facultative anaerobes selected from nature for their ability to break down a broad range of difficult-to-degrade organic compounds.

# Applications

**MICROCAT-PR** is formulated for application in biological wastewater treating plants receiving petroleum refining and/or petrochemical wastes. These plants accept a wide range of crude petroleum residues, ammonia, mercaptans, sulfides, amines and other organic compounds, some of which are toxic and/or difficult to degrade. Such compounds tend to pass through the system or cause system upsets resulting in poor effluent quality and increased operating costs. **MICROCAT-PR** contains safe, naturally-occurring, preselected, adapted microbial strains for enhanced biodegradation capacity. When used on a preventive maintenance basis in the wastewater treatment plant, this product can enhance the ongoing operations and improve overall system performance at reduced cost. **MICROCAT-PR** is formulated specifically for use by the petroleum refining, petrochemical and related industries, and for use in municipal plants receiving wastes produced by these industries.

# **Product Characteristics**

Appearance	Beige, granular powder
Contents	Specialized, preselected microorganisms on natural carrier
Nominal Microbe Count	Formulated to contain 3 x 10 <sup>9</sup> /gram
Shelf Life	Two Years
Packaging	25 Lb (11.3 Kg) plastic pails/220 Lb (100 Kg) fiber drums. Also 1 Lb. (0.45 kg) $H_2O$ sol packets

#### **Application Programs**

In general, **MICROCAT-PR** is applied directly to the aeration zone of the biological waste treatment plant on a preventive maintenance basis. Application rates range from about 30 pounds (13.6 kg) per MGD (3785 m<sup>3</sup>/day) per day for upset recovery to one pound (0.45 kg) per MGD (3785 m<sup>3</sup>/day) per day for preventive maintenance. Your Bioscience, Inc. Technical Representative will provide you with a custom-tailored application program to fit the specific needs of your treatment system.

#### **Optimal Application Conditions**

Condition	Range	Optimum
Dissolved Oxygen, ppm	0.5-2.5	2.0
рН	6 - 9	7
Temperature, <sup>o</sup> C	10 - 40	35
Toxic Heavy Metals, ppm	<5	None
Toxic Organics	Low to High	Low

# Storage and Handling

Storage	45° – 105°F (7° – 40°C) Dry conditions. DO NOT FREEZE. If packeted,
	do not moisten or open packets prior to use.
Handling	CAUTION Avoid inhalation of dry powder or liquid mist. Avoid exposing skin to dry powder or strong solution as irritation may result. If material
	contacts skin or eyes, flush thoroughly and repeatedly with water.

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