

# **MICROCAT®-XP** Pulp & Paper Waste Biodegrader for Wastewater Treatment Plants



## Description

**MICROCAT-XP** is a synergistic blend of preselected, adapted microorganisms for use in biological treatment plants receiving aqueous wastes from pulping and paper making operations.

#### Applications

Biological wastewater treating plants receiving pulping and paper making wastes from timeto-time encounter difficulties in achieving desired effluent quality. Variable operating conditions may cause continuing system malfunction requiring major capital and operating expenses. **MICROCAT-XP** combines preselected, adapted microbial strains with enhanced waste degradation capability. When used on a preventive maintenance basis, this product can improve overall system performance while reducing operating costs. **MICROCAT-XP** contains a combination of aerobic and facultative anaerobic microorganisms selected from nature for their ability to break down a broad range of substances encountered in pulping and paper making waste. These include lignins, cellulosics, sizes, surfactants, fibrous solids and other wastes.

## **Product Characteristics**

Appearance	Beige, granular powder
Contents	Specialized, preselected microorganisms
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

### **Application Programs**

In general, **MICROCAT-XP** is applied directly to the aeration zone of the waste treatment plant on a preventive maintenance basis. Application programs range from about 25 pounds (13.6 Kg) per MGD (3785 m<sup>3</sup>/day) per day for upset recovery to one-half pound (0.23 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**

For best results, apply this product under the following conditions:

CONDITION	RANGE	OPTIMUM
Dissolved Oxygen, ppm	0.5 - 2.5	2.0
рН	6 - 9	7
Temperature, <sup>0</sup> C	10 - 40	35
Toxic Heavy Metals, ppm	Trace	None
Nutrients:		
BOD: NH <sub>3</sub> -N	10:1 – 10:0.5	10:1
BOD: PO <sub>4</sub> -P	100:1 - 100:0.5	100:1

If your system is operating outside these ranges, contact your Bioscience, Inc. Technical Representative for a complete system survey and recommendations.

#### Storage and Handling

Storage	45° - 105° F (7° - 40° C) Dry conditions; DO NOT FREEZE.
Handling	CAUTION Active enzymes present. 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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