



Bioscience, Inc.

Environmental Products & Services

ISO 9001:2015 Certified

MICROCAT[®]-XNL and XNC

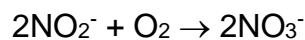
Ammonia Oxidizing Bioformula for Wastewater Treatment Plants



Description

MICROCAT-XNL is a liquid suspension of preselected, adapted nitrosomonas and nitrobacter microbial strains for use in biological wastewater treatment plants receiving wastes containing ammonia. **MICROCAT-XNL** is a non-refrigerated liquid. **MICROCAT-XNC** is a refrigerated slurry concentrate.

Nitrification Process: Oxidation of ammonium ions to nitrate



Applications

Under toxic and/or cold-weather conditions, the growth rate of natural nitrifying populations tends to slow appreciably, allowing ammonia to pass through the system. **MICROCAT-XNL** synergistically combines the capability of several natural ammonia-oxidizing microbial strains for reseeded nitrifying systems and enhancing performance under toxic, inhibitory or cold-weather conditions. When used on a preventive maintenance basis, **MICROCAT-XNL** can improve the consistency of ongoing nitrification and improve overall system performance. **MICROCAT-XNL** is formulated specifically for use by the chemical, food processing, petroleum refining, primary metals, textile and related industries and for use in municipal plants receiving wastes containing ammonia.

Product Characteristics

Appearance	Non-viscous, liquid suspension
Contents	Specialized, preselected microorganisms
Packaging - XNL	5/55 gallon (18.9L/208.2L) (42 Lb/465 Lb) (19.06 Kg/211.36 Kg) plastic drums (unrefrigerated)
Packaging - XNC	1 gallon (3.785 L) (10 Lb) (4.54 Kg) wide mouth bottles (refrigerated)

Application Programs

MICROCAT-XNL is metered directly to the aeration zone of the waste treatment plant on a preventive maintenance basis. Application programs range from about 30 gallons (113.6 L) per MGD (3785 m³/day) per day to one gallon (3.785 L) per MGD (3785 m³/day) per day. Your Bioscience, Inc. Technical Representative will provide you with a custom-tailored application program to fit the specific needs of your treatment system. **MICROCAT-XNC** is used at rates 1/10 or 1/20 those for **XNL**, saving shipping and handling costs.

Optimal Use Conditions

CONDITION	RANGE	OPTIMUM
Dissolved Oxygen, ppm	>1	>2
pH	6.5 – 9.0	7.5 – 8.0
Temperature, °C	10 – 40	20 - 30
Toxic Heavy Metals, ppm	<0.1	None
Toxic Organics, ppm	Trace	None
Alkalinity, ppm as CaCO ₃	>40	>100

Storage and Handling

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

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