# TECHNICAL SPECIFICATION

# Revolution in biological

# Waste water treatment

# AQUAZYME

AQUAZYME which are effective microbes (EM) contain multiple strains of aerobic, facultative, aerobes nd anaerobic bacteria's which are selected for their compatible, symbiotic metabolic pathways based on different industrial effluent characteristics. AQUAZYME products are manufactured from a unique solid fermentation process of selected culture of beneficial bacteria for different industries.

Microbial **AQUAZYME** are innovated with 18 years of intensive research and development which suit specific needs of various industries. Products are manufactured with stringent laboratory standards incorporating modern equipments using scientific innovative formulas- to achieve ISO 9001-2008 and NABL accreditations for laboratories.

### MICROBIAL AQUAZYME ON WASTE WATER TREATMENT

Our customers include, Dye Industries, Leather & Tannery, Paper and Pulp Mills, Chemical Industries, Pharmaceuticals, Sugar & Distilleries, Food & Beverages, Breweries, Wine & Alcohol Plants, Automobile, Petro-Chemicals, ETP's, STP's, Common Effluent Treatment Plant, Common Sewage Treatment Plant etc.

**AQUAZYME** is very useful to help industrial community, municipal authorities, commercial and public properties. We carry out a vast amount of R&D work. Current focal points include Zero Sludge, COD, BOD, TDS,TSS, heavy metals reduction with low cot treatment of biological high-performance systems.

AQUAZYME DESCRIPTION		
Available form	Organic semi-solid form	
Number of bacterial cultures	60 Different bacterial culture	
Stage of bacterial culture	Living bacteria	
Number of bacterial colonies	63 x 10 <sup>9</sup> CUF/ml	
Shelf life	Min one year	
Suitability	Wide range of p <sup>H</sup> , High COD, High TDS effluent	

PARAMETERS / PARAMETERS	PERCENTAGE OF REDUCTION
Sludge degradation	Zero sludge
Chemical oxygen demand (COD)	upto98%
Biological oxygen demand (BOD)	upto98%
Color	upto90%
Odor	Upto100%
Removal of suspended solids & floatable organic	upto100%
debris	
Reduces total suspended solids (TSS)	upto92%
Reduces total dissolved solids (TDS)	Depends on characteristics
Increases dissolved oxygen (DO)	Min-3 Max-8

#### WHERE THE AQUAZYME TO BE USED

Activated sludge process (Aeration tank)	Collection and equalization tank
Aerobic treatment plant	Common effluent treatment plant (CETP)& effluent
060 80 200060 80 20006	treatment plant (ETP)
Anaerobic digester	Sewage treatment plant (STP)
MBR (membrane bio reactors)	Up-flow anaerobic sludge blankets reactor (UASBR)
Composite inoculums	Biogas production in biogas digester
Septic tanks & sludge pits	Agriculture bio-fertilizer

### SILENT FEATURES OF USING AQUAZYME

Avoid pretreatment/Avoid chemical treatment	Reduction of sludge
Low cost treatment	Degradation of organic pollutants & heavy metals
Reduction in aeration time & blower	Avoid sludge handling
Low energy consumption	Increase bio gas production
Reduction of >50% electricity usage	Treats suspended & floatable organic debris
Improved anaerobic digester efficiency	Degradation of organic & inorganic chemicals

GENERAL RECOMMENDED DOSAGE (FOR 2-3 MONTHS): AQUAZYME - = 10 KG /100 KL

NUTROZIME - = 10 KG/100 KL

## **AQUAZYME PREPARATION METHOD**

AQUAZYME 1 KG + NUTRIENTS 1 KG + 1 kg JEGGRY+ 50 LT WATER INCUBATION 5 DAYS = AQUAZYME BACTERIA CULTURE

DOSAGE METHOD AT SITE TO GET OPTIMUM RESULTS BASED ON 100 KL. Effective Temp. 20-60°, Effective pH 3-12

Volume makes up to 300 liters with ground water and keeps it for incubation for 5 days. The Microbial Inoculums will be ready.

I DOSAGE: (After 5Days of Incubation) Add the 50 liters of proliferated incubated microbial AQUAZYME after seven days to the aeration tank.

**II DOSAGE: (After3 Days of I dosage)** Add the Required (50 **liters)** of proliferated incubated microbial AQUAZYME after I dosage to the aeration tank.

**III DOSAGE: (After 7 Days of II dosage)** Add the 50 **liters** of proliferated incubated microbial AQUAZYME after I dosage to the aeration tank.

**IV DOSAGE: (After 4-5 Days of III dosage)** Add the 50 **liters** of proliferated incubated microbial AQUAZYME after third dosage to the aeration tank.

**V DOSAGE: (After 7 Days of IV dosage)** Add the 50 **liters** of proliferated incubated microbial AQUAZYME after fourth dosage to the aeration tank.

**VI DOSAGE: (After 7 Days of V dosage)** Add the 50 **liters** of proliferated incubated microbial AQUAZYME after fifth dosage to the aeration tank. .

# **SUBSEQUENT DOSAGES**

Subsequent dosages will be given from sixth dosage up to three months.

(The dosage will be vary depends on effluent characteristics and pollutant load in ETP).

### Our vision

To be globally recognized as the first innovative technology in delivering energy efficient biological treatment system for waste water treatment.

#### Our mission

To deliver to all the people of the world the most environmentally responsible, affordable and effective water treatment systems

# **Our strategy**

To transfer the Innovative Research Technologies to the industrial wastewater treatment Plants and to Save Energy, the most useful and cost effective waste water treatment systems

#### Our values

Innovation is the cornerstone of our business. We place the highest priority on encouraging, developing, supporting and training our people to be the very best in the industry Our customers are the ultimate judge of our performance and we strive to be recognized as being the best in the industry



A PRODUCT OF : AQUA CHEMICALS

CHEMICAL EXCELLENCE FROM INDIA
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