TECHNICAL SPECIFICATION

Revolution in biological

Waste water treatment *NANOZYME*

Nanozyme 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 . ***NANOZYME*** *products are manufactured from a unique solid fermentation process of selected culture of beneficial bacteria for different industries.*

Microbial ***NANOZYME*** *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 NANOZYME 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.***

NANOZYME *are 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.*

NANOZYME 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 10^9 CUF/ml
Shelf life	Min one year
Suitability	Wide range of p^H, High COD, High TDS effluent

PARAMETERS	PERCENTAGE OF REDUCTION
Sludge degradation	Zero sludge
Chemical oxygen demand (COD)	98%
Biological oxygen demand (BOD)	98%
Color	90%
Odor	100%
Removal of suspended solids & floatable organic debris	100%
Reduces total suspended solids (TSS)	92%
Reduces total dissolved solids (TDS)	Depends on characteristics
Increases dissolved oxygen (DO)	Min-3 Max-8

WHERE THE NANOZYM TO BE USED

Activated sludge process (Aeration tank)	Collection and equalization tank
Aerobic treatment plant	Common effluent treatment plant (CETP)& effluent 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 NANOZYME

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) : **NANOZYME – BET-ETP-7003 = 10 KG /100 KL**

NANOZIME—BET-NUTRI-9003 = 10 KG/100 KL

NANOZYME PREPARATION METHOD

NANOZYME 1 KG + NUTRIENTS 1 KG + 50 LT WATER INCUBATION 5 DAYS = NANOZYME BACTERIA CULTURE

DOSAGE METHOD AT SITE TO GET OPTIMUM RESULTS BASED ON 100 KL. Effective Temp. 20-60^{0,} Effective p^{H} 3-12

Volume makes up to 300 liters with ground water and keeps it for incubation for 7 days. The Microbial Inoculums will be ready.

I DOSAGE: (After 7Days of Incubation) Add the 50 **liters** of proliferated incubated microbial nanozyme after seven days to the aeration tank.

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

III DOSAGE: (After 7 Days of II dosage) Add the50 **liters** of proliferated incubated microbial nanozyme after I dosage to the aeration tank.

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

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

VI DOSAGE: (After 7 Days of V dosage) Add the 50 **liters** of proliferated incubated microbial nanozyme 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

Journals International Research Papers Published

A PRODUCT OF : AQUA CHEMICALS
CHEMICAL EXCELLENCE FROM INDIA
ISO 9001-2008 certified company
A CERTIFIED WATER TECHNOLOGIST (USA) & MEMBER OF WATE ENVIRONMENT FEDERATION (U.K.)
Contact: +919414067366 e-mail: info@aqua-chemicals.co.in