

most accelerated
THE ENZYME BASED WASTE MANAGEMENT







Every day, the world keeps generating more and more waste. From landfill sites to stagnant water bodies, toilets to cooling towers, restaurant grease traps to hospital drain lines, abattoirs to urban run-off waters; a range of organic and inorganic waste creates an array of pollutants and bacteria harmful for humans, livestock and the environment.

Effective waste management entails complete degradation of all types of waste in a speedy, harmless and cost-effective manner. And therein lies a huge challenge!



Harmful Effects of Chemical based Waste Management

The conventional mode of waste management for decades has been chemical based. Treatment of waste with chemicals comes with a number of drawbacks:

- It cannot achieve 100% degradation of organic or inorganic waste
- Has limited application areas
- Does not give desired results in all geographic conditions
- Causes corrosion to equipments.

A great shortcoming of chemical based waste treatment is its speed of degrading waste. And it doesn't even provide a permanent waste treatment solution, often masking the under treatment waste and odour! Traces of chemicals that remain in application areas add to the hazard, posing a grave threat to the health of humans and livestock, and are proven to be harmful to the environment too.

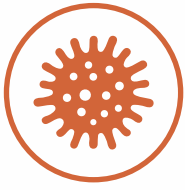


Enzyme Based Waste Management & their benefits

Treating wastes with chemicals does provide a solution, but with major side effects. With proper education and evolution of technology, there has been an increasing understanding and acceptance of the resourceful nature in providing effective solutions to many worldly problems.

We have, today, come to realize that it's much better and safer to treat wastes in the nature with natural elements; and have therefore moved on to the much safer and faster enzyme based waste management.

Enzymes technically are proteins, produced naturally by both plants and animals. As bio-chemical catalysts, enzymes accelerate chemical reactions at extraordinary reaction speed in natural environments. Enzymes are also 100% biodegradable and organic, completely safe to use and find applications over a much broader range of geographical conditions.



Landmark's New Technology with Hyper Catalase

Landmark Enviro-Care has long realised that mother nature alone holds the best solution for waste management. After nearly two decades of extensive research worldwide with enzymes sourced from nature, Landmark offers a path breaking and innovative technology - Hyper Catalase - bringing forth a host of advanced and eco-friendly waste management solutions with 100% organic active natural enzymes.

What is Hyper Catalase?

- It's the most superior enzyme sourced from nature researched, developed and tested across world geographies.
- Developed from naturally occurring microbes found in thriving mangrove ecosystems, proven for its amazing ability to sanitise water and environment around it.
- A number of bacteria strains and rare yeasts were sourced and clinically concocted through an advanced vacuum freeze drying process to form the Hyper Catalase - which is the catalyst to the bio-chemical reactions, able to rapidly remove the waste products from every geographical condition.





Superkino Enzymes – A Derivative of Hyper Catalase Technology

Superkino Enzymes are the new generation enzyme concoction with the ability to degrade waste at a kinetic rate millions of times faster. A group of beneficial microorganisms is clinically blended to form the superior, highly concentrated and lightning fast acting Superkino Enzyme.

Superkino Enzymes and their superior advantages

- Works at a kinetic rate many million times faster than currently used enzymes.
- Performs 4 core capabilities of rapidly breaking down organic waste anti-microbial, anti-fungal and toxin neutralization, with the speed enhancement.
- Formulated to create a very diverse group of catabolic hydrolyzing enzymes with ability to rapidly and fully digest all non-living matter that is organic in origin.
- Its kinetic rate enhancement technology is able to operate in a much broader range of environmental conditions than other available products.

Salient Features

- Highly specialized, innovative blends of enzymes
- Fights other general pathogenic microbes and controls pollution most effectively
- Not Genetically Modified (GM) as it is derived strictly from a pure strain of naturally occurring microbes
- Helps balance the environment and performs a range of useful bio-remediation functions
- Treats wide range of waste products
- Cost effective.





Landmark's Hyper Catalase Application and Products

Hyper Catalase formulated with highly developed non-genetically modified Superkino Enzymes present a wide range of applications in:

- **Environment Solutions**
- **Aquaculture**
- **Agriculture & Livestock**
- **Food Supplement**
- **Consumer Products**

Landmark Enviro-Care brings to you four exclusive Hyper Catalase products as path breaking waste management solutions across wide ranging application areas:



Enzoclean

Biological solid waste neutralizer



Aquaclean

Water bodies & aqua waste digester



Greaseclean

Biological drain line and grease trap cleaner



Septiclean

Septic tank cleaner



ENZOCLEAN

BIOLOGICAL SOLID WASTE NEUTRALIZER

**Accelerated degradation of
organic waste and elimination of odour**



ENZOCLEAN – Biological Solid Waste Neutralizer

Growth of undesirable bacteria in landfills, industrial waste treatment facilities and livestock confinement area produces strong odour from gas offs such as hydrogen sulfide, methane and ammonia. Enzoclean is a degassing and odour eliminator formulated to treat ammonia and other undesirable gases in such areas.

Enzoclean contains high concentration of naturally occurring probiotics, enzyme complexes and odour counteractant, having a very strong and high tolerance to an environment for out-completing and help prevent the outspread of odour and pathogenic bacteria.

Advantages

- Works to degas all principles of organic and inorganic odour
- Helps to eliminate offensive odour producing bacteria
- Attacks the layer of organic build up in the porous surface area
- Improves the efficacy of degrading accumulated organic wastes
- Environmentally sound, biodegradable components for broader activity spectrum
- Non-corrosive and non-toxic
- Enables accelerated decomposition and higher yield on composting
- Eliminates insect menace
- Reduces garbage pile temperature, fewer instances of landfill fires

Application Area

- Landfills
- Garbage Disposal
- Manure Drying Area
- Slaughter Houses
- Sludge Digester
- Cattle Farms
- Sheep Farms
- Poultry House
- Hog Farms
- Composting Units
 - Industrial Units
 - Residential Societies
 - Office Premises



Also available in bulk quantities of **10 & 20 litres**



AQUACLEAN

WATER BODIES AND AQUA WASTE DIGESTER



**Powerful organic digestion
for waste water treatment facilities**

AQUACLEAN – Water Bodies and Aqua Waste Digester

A range of industrial and municipal waste water treatment facilities and natural water bodies like streams and ponds are accumulation areas of huge quantities of organic waste and sources of strong stench and pathogenic bacteria.

Aquaclean Waste Digester contains powerful waste digesting enzymes to degrade all the principle organic constituents normally found in the natural water bodies and municipal and industrial wastewater treatment facilities; and can be effectively used in improving the efficiency and odour control there.

Aquaclean can also be made available in customised formulation upon request.

Advantages

- Reduces BOD, COD and SS in municipal and industrial wastewater treatment effluent
- Improves the sanitation level of potable water
- Enables rapid recovery from upsets
- Improves floc settling formation, thus preventing bulking sludge
- Improves waste degradation of specific target compounds
- Enable to absorb the shock of toxic influent
- Enhances the stability of municipal and industrial wastewater treatment systems
- Enhances odour control through natural organic acid oxidation
- Environmental friendly, biodegradable component for broader activity spectrum
- Non-corrosive to equipments

Application Area

- STPs
- ETPs
- Lakes
- Ponds
- Rivers
- Canals
- Sewerage Systems
- Drainage Systems
- Cooling Towers
- Grease Pits



Also available in bulk quantities of **10 & 20 litres**



GREASECLEAN

BIOLOGICAL DRAIN LINE AND GREASE TRAP CLEANER



**Effective de-clogging of grease traps and drain lines
in hospitality kitchens and facilities**

GREASECLEAN – Biological Drain Line and Grease Trap Cleaner

Organic waste constituents normally build up in restaurant kitchen grease traps and drain lines in hospitality industry, F& B outlets and hospitals, choking and blocking up drain and sewer lines, giving rise to pathogenic bacteria and offensive odour.

Greaseclean grease trap and drain line cleaner contains powerful waste digesting enzymes, essential nutrients and specially selected strains of enzymes producing bacteria to degrade all the principle organic constituents normally found in drain line and grease trap systems.

Greaseclean incrementally breaks down organic build up in kitchen grease trap systems and drain lines under both aerobic and anaerobic conditions, thus freeing up blockages while conducting effective odour control in an environmentally sound manner and non-corrosive to equipments.

Advantages

- Eliminates offensive odour in drain line and grease traps environment
- Liquefies organic build-up in slow running drain line
- Prevents drain and sewer line blockage
- Ensures free flowing drain line
- Reduces grease trap pumping-out
- Restores natural beneficial bacteria in drain line and grease traps
- Extremely economical to use
- No residue, environmental friendly and safer to use than harsh chemicals

Application Area

- Restaurant Kitchens
- Hotels & Resorts
- Spa
- Club House
- Hospitals
- Food Plaza / Complexes
- Department Stores
- Airports
- Fast food / Bakery Outlets
- Ice Cream Parlours
- Gas Stations
- Industrial Areas





SEPTICLEAN
SEPTIC TANK CLEANER



**Speedy organic waste digestion
and odour control in septic tanks**

SEPTICLEAN – Septic Tank Cleaner

Effective odour control in the septic tank system poses a huge challenge in every home, office, factory, institution or public place.

Septiclean septic tank cleaner contains powerful waste digesting enzymes, essential nutrients and selected strains of enzymes producing bacteria. The enzyme complex acts to break down the organic material into water-soluble nutrients. The selected bacteria digest the released nutrients, multiply and produce more enzymes to continue cleaning the entire septic tank systems facilities under both aerobic and anaerobic conditions.

Septiclean incrementally breaks down organic build-up in septic tank system and ensures effective odour control in an environmentally sound manner in septic tanks systems of a large number of establishments.

Advantages

- Ensures offensive odour control
- Helps prevent septic tank buildup
- Prevents clog drain fields and sewer line blockage
- Reduces frequent pump-out
- Restores natural beneficial bacteria in septic system
- Improves and helps speed up the breakdown of organic wastes
- Accelerates the liquefying process
- No residue, environmental friendly and safer to use than harsh chemicals
- Reduces the frequency of septic tank cleaning

Application Area

- Institutions
- Schools & Universities
- Office Buildings
- Factories
- Hotels & Resorts
- Hospitals
- Apartments
- Food Complexes & Restaurants
- Airports
- Departmental Stores
- Gas Stations
- Bus Terminals





Landmark's Hyper Catalase - Product Performance

Effect of Enzoclean on Solid Waste

Parameters	Before	After	Change
Temperature	36 °C	47 °C	+ 31 %
Protein/Nitrogen	9.00	3.86	- 57 %
Carbon/Nitrogen	6.60	0.85	- 87 %
Hydrogen Sulphide	16.20	5.14	- 68 %
Ammonia	56.20	8.88	- 84 %

Effect of Enzoclean on Water Waste

Parameters	Before	After	Change
TSS	18.20	15.60	- 15 %
TDS	4239.00	2640.00	- 38 %
BOD	22.08	20.00	- 9 %
COD	44.00	52.00	+ 18 %
Dissolved Oxygen	2.40	3.60	+ 50 %

Some of the areas where Landmark Enviro-Care is leading the war against waste

- Solid Waste Odour & Decomposition Treatment – Navi Mumbai Municipal Corporation
- Solid Waste Odour & Decomposition Treatment – Kanjurmarg Dumping Site, Municipal Corporation of Greater Mumbai
- Ambient Air Monitoring – Kanjurmarg Dumping Site, Municipal Corporation of Greater Mumbai
- Pond Treatment – Navi Mumbai Municipal Corporation
- Pond Treatment – Umaid Bhawan Palace, Taj Group of Hotels, Jodhpur
- Pond Treatment – Ground Water & Mineral Investigation Consultancy Centre, Jaipur
- Cooling Tower Treatment – Westin Hotel, Pune
- Toilet Treatment – K/West Ward, Municipal Corporation of Greater Mumbai

Commercial Composting

Landmark Enviro-Care's Hyper Catalase facilitates effective composting of large amounts of waste in industrial and commercial spaces.

Specially formulated enzymes using naturally occurring microbes improve the efficacy of degrading accumulated organic wastes.

Environmentally sound and biodegradable, it also enables accelerated decomposition and gives higher yield on composting.



Residential Composting

Landmark Enviro-Care's Hyper Catalase offers the most efficient and convenient way to enable composting at home.

Specially formulated enzymes using naturally occurring microbes act as the most effective composting accelerators for home composting units.

Super active enzymes are sprinkled over wastes generated in the kitchen in a composting unit to generate manure for growing plants.



Large Water Bodies

Landmark Enviro-Care's Hyper Catalase provides the best manner of treating contaminated water and organic waste in large natural water bodies like streams and ponds.

Contaminated water from the water bodies is sucked out and treated with powerful waste digesting enzymes and clean water is recycled back into the water bodies.

Improves the sanitation level of potable water and enhances odour control. It is environmental friendly, biodegradable and non-corrosive.



AC Cooling Towers

Landmark Enviro-Care's Hyper Catalase is an excellent solution for ensuring optimum efficiency of AC cooling tower systems.

It ensures quick and effective water treatment and generates fresh clean air. Increases low temperature exchange and enables cooler air flow by decreasing shield guard from bio film.

Eliminates blue green algae and digests bio film sticker on pipeline and decreases electricity power usage.



Landmark Enviro-Care's Hyper Catalase formulated with the innovatively developed Superkino Enzymes makes the process of waste management most effective till date, degrades all types of organic and inorganic waste completely, at a speed million times faster than the currently used enzymes, proven to work on wide ranging application areas under almost every geographical condition, reduces operating costs significantly, totally harmless, safe to use and bio-friendly.



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