

Chemical Division



MAXGREEN EMBC

Efficient Microbes

Wastewater Treatment

“ We pledge to protect Environment ”



Thermax Chemical Division

The Chemical Division of Thermax has been moving with a mission for decades : Innovation in the business areas of water, fuel and oil treatment–the three pillars of industrial processes. As the globe shifts towards ecological production techniques, we too are concentrating on cost-effective solutions to the growing problems of fuels, water, effluents and environment. We manufacture chemicals to enhance the performance of production processes keeping environment friendliness central to our functioning.

Chemical Division Product Portfolio

- ▶ Ion Exchange Resins
- ▶ Wastewater Treatment Chemicals
- ▶ Construction Chemicals
- ▶ Fuel & Water Treatment Chemicals
- ▶ Oil Field Chemicals
- ▶ Pulp and Paper Chemicals

Wastewater Treatment

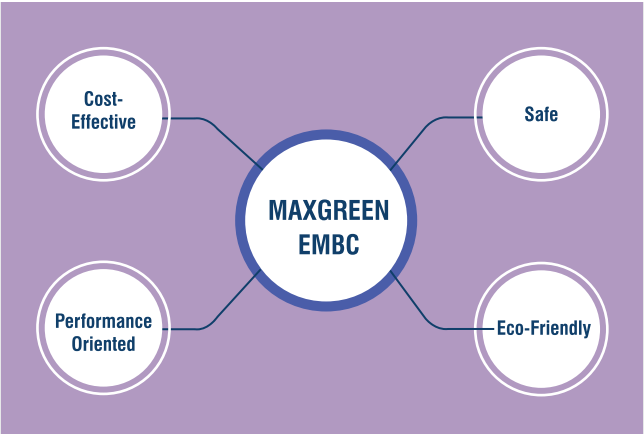
Wastewater treatment operation and maintenance is a complex process - one that is essential for the successful treatment of wastewater before it is discharged into the environment. Effluents may vary from industry to industry, but the premise is the same; one must ensure that in no way it adversely affects the environment.

Dynamics of ETP operation

- ▶ High COD
- ▶ High BOD
- ▶ High TDS
- ▶ Poor Biomass
- ▶ Shock Loads & Toxicity
- ▶ Foaming
- ▶ Colour & Odour
- ▶ Hydraulic loading
- ▶ High Operation & Maintenance cost
- ▶ Space Constraints in Expansion

Efficient Microbes

Thermax developed an in house product in Biotech Research and Development Laboratory at Thermax Chemical Division. This product is a blend of selected strains of Microbes and will fall under **MAXGREEN** range of products. Efficient Microbes speed up the natural reduction of pollution which is useful in accomplishing many positive environmental objectives. Solid reduction, reduced BOD, COD & increase in MLSS are some of the benefits of using **MAXGREEN EMBC** in wastewater treatment.



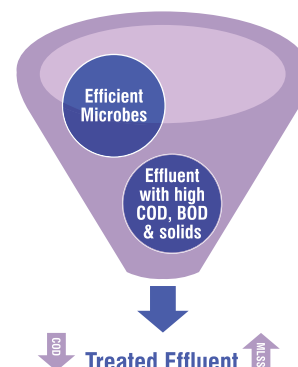
Application in Various Systems

- ▶ Activated Sludge Process (ASP)
- ▶ Sequencing Batch Reactor (SBR)
- ▶ Membrane Bio Reactor (MBR)
- ▶ Lagoon Process
- ▶ Extended Aeration

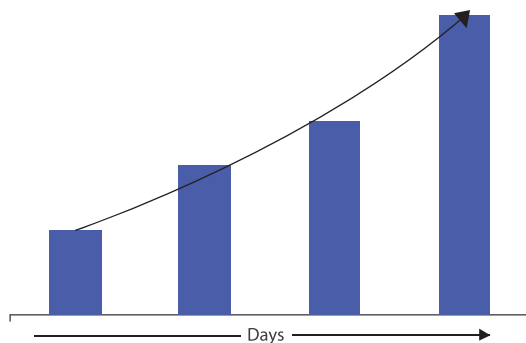


How does MAXGREEN EMBC works ?

Microbe's in **MAXGREEN EMBC** produce enzymes and other compounds which degrade tough to degrade organic pollutants by converting it to carbon dioxide & other gases and use it for its microbe's growth & reproduction. These factors suggest MAXGREEN EMBC assist in the treatment of wastewater by enhancing the quality of water discharged and sewage sludge produced.

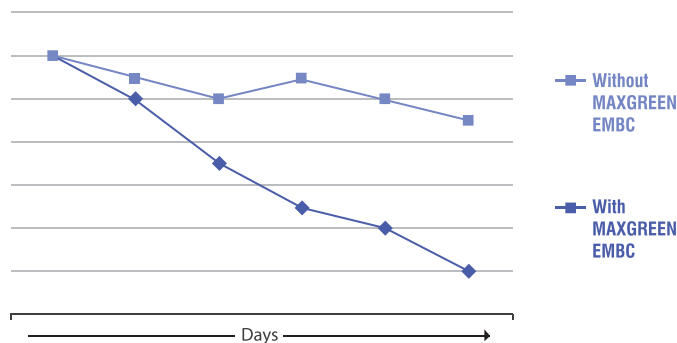


Increase in MLSS



*Increase in MLSS (mg/L) in Effluent after treatment with MAXGREEN EMBC

Decrease in COD



*Decrease in COD (ppm) in Effluent with and without treatment with MAXGREEN EMBC

Benefits of MAXGREEN EMBC

- ▶ Eco friendly product.
- ▶ Contains robust microbial strains with faster metabolic rates.
- ▶ Enhanced plant efficiency.
- ▶ Low running cost.
- ▶ Effluent after discharge meets Pollution Control Board norms.
- ▶ Reinforcement of Biomass
- ▶ Non Corrosive and Non Pathogenic





Quality Assured Manufacturing

Thermax is committed to develop, manufacture, deliver and apply quality Wastewater Treatment Chemicals to meet customer expectations.

Thermax Chemical Division complies with the requirements of ISO 9001 and continually improve the effectiveness of the quality management system by establishing and reviewing quality objectives.

Credentials

Thermax Chemical Division's manufacturing is accredited with ISO 9001:2008, ISO 14001:2004 and OHSAS 18001:2007 certifications.

Research and Development

The Division's R&D, with its state-of-the-art laboratories is at the forefront of developing new products and technologies. Our R&D is approved by the Department of Science & Technology, Government of India and collaborates with many scientific and academic institutes. Thermax delivers the next generation of customer focused technologies within our core technologies using its unique, market - based management approach.



Thermax Chemical Division

Environment House Plot No.90-92,
BG Block, MIDC, Bhosari, Pune - 411026, India.

Tel : +91 20 67156154 / 67156000
Fax : +91 20 27120206

Customer Care : 18002090115 (India toll free)

Email : enquiry@thermaxglobal.com

www.thermaxglobal.com

Thermax Business Portfolio

- Chemicals
- Cooling
- Power Generation
- Air Pollution Control
- Heating
- Water and Wastewater Solutions
- Solar
- Specialised Services