

COD/ BOD Removal

Wastewater solution for degradation of specific compounds



COD/BOD Removal Microbe

Introduction

Biodegradation products assist wastewater treatment plants that just cannot degrade specific compounds. This issue can be caused by multiple factors: the variability of the compound(s) in the influent may not allow the biomass to acclimate to the material, or, the system may not be designed to achieve removal—for example; not enough residence time or high enough sludge age to achieve nitrification. In addition, the wastewater discharge permit limitations can change to require removal of specific compounds due to water quality limitations or regulatory mandates. If regulations change, influent wastewater changes, or plant operations change, the biological process of the system must be able to meet the new goals or deal with the new environment.

An effective way to improve the overall system is to improve the ability of the wastewater system's biomass to degrade the target compound. By seeking out biodegradation products with microbes that are extremely good at degrading compounds and supplementing the biomass with them, the biomass can be changed to better remove a specific compound. This could be by either improving the speed or ultimate removal of the compound, or by making the biomass less susceptible to upsets that have negative effects on the removal rate.

What is COD Removal Microbe

COD Removal microbe is a consortium of vigorous and specific microbes that are good at degrading organic pollutants and can

effectively help to maintain the outlet parameters of effluent within limits.

Biological reformulated from bacillus, organic acids, natural biological systems, buffers, nutrients, and energy systems which enhances biological degradation. It is non-toxic, concentrated and easy to use. It can oxidizes wastewater lagoon sludge into carbon dioxide through an innovative “wet burn” process, and helps balance the microbial ecosystem of the indigenous microbes causing biodegradation of the carbonaceous materials to harmless gases, water and humus. Reduces noxious odor produced from organic waste decomposition.



Application & Uses

- ✓ Wastewater treatment plants
- ✓ Industrial effluent
- ✓ Municipal sewage
- ✓ Commercial waste water
- ✓ Domestic waste water
- ✓ Pulp & paper
- ✓ Refining/petrochemical
- ✓ Organic chemical & pharmaceutical
- ✓ Food processing & Dairy industry
- ✓ Industrial pretreatment
- ✓ Collection system

Benefit of COD Removal Microbe

- ✓ The effective natural way to establish and maintain sewage biological treatment system without chemicals.
- ✓ Digests difficult compounds that are toxic to naturally occurring bacterial or existing generic bacterial,
- ✓ Provides rapid breakdown of difficult-to-degrade substances: surfactants, fats, oil, sulphides, mercaptans, phenols, cresylates, hydrocarbons, aromatic compounds etc,
- ✓ Performs efficiently in effluents having high total dissolved solids (TDS),
- ✓ No modification of the current process required,
- ✓ Low treatment cost, Increases efficiency of the treatment plant and saves energy costs, Typically costs a fraction of a cent to treat a liter of effluent,
- ✓ Odour control cause complete biodegradation of organic compounds,
- ✓ Generates minimum sludge as most of the waste is converted to carbon dioxide and water,
- ✓ Improve the health of system's existing biomass and its ability to degrade target compound,
- ✓ Increase system stability and resistance to washout, upset from high loading, and recovery from mechanical failure.
- ✓ There are no pathogenic organisms, easy to feed, economical to use

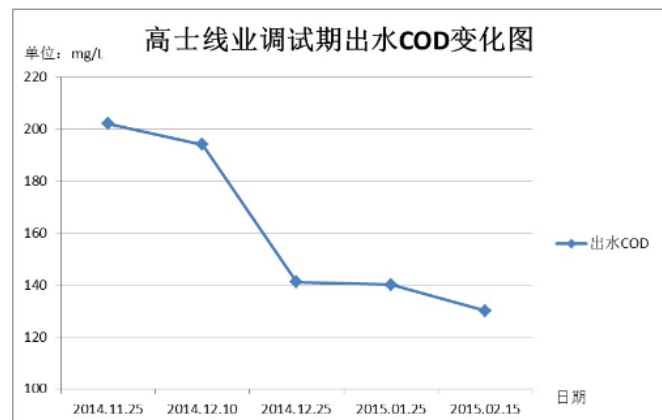
Dosage & Method

Initially dosage 30 gram / 1 time / cum, 1 time / 3 days, continue to dosing 5 times, Subsequently use 30 gram / time / 15 days to maintain performance.

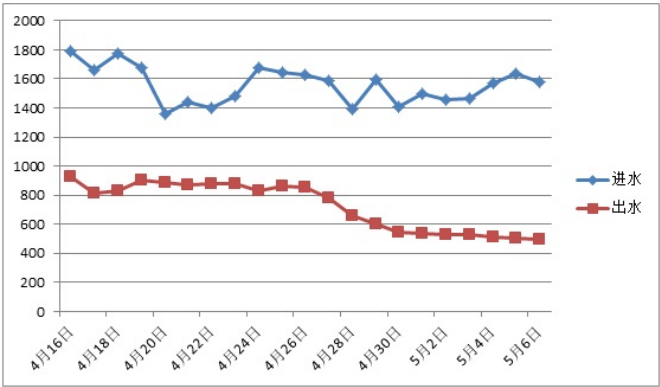
Dissolve microbe into water, 1kg :20 Liter, then spray to aeration tank evenly, activate aerating for 24 hour.

Case Study

Dyeing industry (COATS Shenzhen Industry)



Pulp & Paper Industry (Chengming Group)



Dairy Industry (CHAER Diary)



Leather Industry (Fuxin Leather Industry)

