BioBooster NOC

The cure for nutrient deficiency in wastewater, and remediation applications



PRODUCT DESCRIPTION:

BioBooster combines the patent pending nutrient feed for microbial digestion technologies, with a continuous method of uniform delivery. BioBooster contains the essential Carbon, Nitrogen and Phosphorus sources in the correct ratio to enhance the bio activity of natural, and bio-augmented systems. The nutrient microbial system enhances the production of enzymes which supply the system with more enzymes in a shorter period of time. Nutrient deficiency makes the systems sluggish, bad nutrition has a dismal effect for the purification process. Biobooster also is formulated with minerals to help as co-enzymes in some of the more complex sequences.

The product is supplied as a solid powder form which dissolves well in pure water. We recommend the aqueous solution of the product to be dosed to the system on a continuous basis. Dosing of the product is recommended to be executed by our Malatech-C Dosing Unit, or by a simple metering pump from any container, if the application is indoor, or does not require temperature control.

FIELDS OF APPLICATION:

- Industrial, and municipal activated sludge wastewater treatment plants
- Industrial, and municipal fixed film wastewater treatment plants
- Wastewater lagoons, effluent holding tanks, tertiary treatment ponds
- Livestock waste streams (lagoons, pre-treatment plants, etc.)
- Hydrocarbon bioremediation





BENEFITS OF BIOBOOSTER NOC:

- Optimizes all biological treatment processes which endures macronutrient, micronutrient, trace element or vitamin deficiency
- Easy to use solid that quickly dissolves in water
- Compact size for easy storage
- · Long shelf life
- Works effectively without introducing environmentally hazardous chemicals
- Safe, and easy to incorporate into your normal treatment routine
- 100% biodegradable, non-toxic, non-hazardous

APPLICATION OF BIOBOOSTER NOC – DOSING, PLANT SETUP, TECHNICAL INFORMATION

IMPORTANT INFORMATION:

Recommended daily dosages are given in ppm based on m³/d average hydraulic raw wastewater load for wastewater applications, while dosages for Hydrocarbon bioremediation applications are given in ppm based on total polluted ground or groundwater volume.

For determining exact dosages for your WWTP or Hydrocarbon bioremediation project, please provide us information by sending us our questionnaire filled with information as much as possible: Click here for questionnaires!

Dosage of BioBooster NOC is preferably continuous by mixing the product with pure water, and pour the content into our Malatech-C Dosing Unit. Our dosing units are easy to install, and use, consume low amount

of space, isolated, and have a heating function for outdoor operations at winter. <u>Click here</u> for more information on the Malatech-C Dosing Unit!

Whenever you have any questions, do not hesitate to contact us!





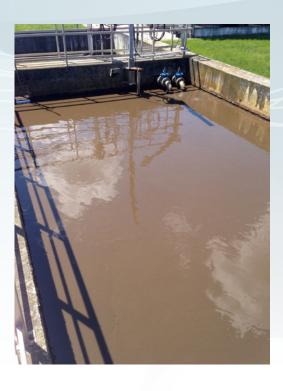
DOSAGE INFORMATION:

Wastewater applications: usually 5-10 ppm, highly dependent on raw wastewater characteristics.

Hydrocarbon bioremediation applications: usually 60-2000 ppm as a nutrient supplement for the SOS5300 Hydrocarbon consuming bacteria, highly dependent on Hydrocarbon type, concentration, method of bioremediation, target concentrations.

DOSING LOCATION FOR WASTEWATER APPLICATIONS:

First biological reactor of the system is recommended, or the product can be dosed directly into the primary treated wastewater entering the first bioreactor of the system. Aqueous solution should be dosed, dosages above are valid for the solid material.



In case of plants running with generally high MLSS, and sludge age, or extremely high MLSS, and sludge age (UF membrane systems), please contact us for further assistance, also please contact us for Complete Process Engineering Assistance service to extract the most of your WWTP with BioBooster NOC!

DOSING LOCATION FOR HYDROCARBON BIOREMEDIATION APPLICATIONS:

Inspection wells for in-situ bioremediation of Hydrocarbon polluted ground or groundwater. Aqueous solution should be dosed, dosages above are valid for the solid material. ALWAYS DOSE BIOBOOSTER NOC BEFORE SOS5300. DO NOT MIX BIOBOOSTER NOC WITH SOS5300!

Storage pond for ex-situ bioremediation of Hydrocarbon polluted groundwater. Aqueous solution should be dosed, dosages above are valid for the solid material. ALWAYS DOSE BIOBOOSTER NOC BEFORE SOS5300. DO NOT MIX BIOBOOSTER NOC WITH SOS5300!

Directly onto the pile of soil in case of ex-situ treatment of Hydrocarbon polluted ground. Aqueous solution should be dosed, dosages above are valid for the solid material. ALWAYS DOSE BIOBOOSTER NOC BEFORE SOS5300. DO NOT MIX BIOBOOSTER NOC WITH SOS5300!





For Hydrocarbon bioremediation projects, please take the table below for consideration (table is from the TDS of SOS5300):

1) Recommended and minimum litre of SOS5300 and kg of BioBooster NOC/m3 of contaminated ground		
1/a TPH is below 1 000 mg/kg0.12 l + 0.12 kg of BioBooster NOC	Minimum:	0.05-0.05
1/b TPH is betw. 1 000-5 000 mg/kg0.25 l + 0.25 kg of BioBooster NOC	Minimum:	0.10-0.10
1/c TPH is betw 5 000-20 000 mg/kg0.5 + 0.5 kg of BioBooster NOC	Minimum:	0.20-0.20
1/d TPH is betw. 20 000 - 50 000 mg/kg1 + 1 kg of BioBooster NOC	Minimum:	0.40-0.40
1/e TPHis above 50 000 mg/kg2 l + 2 kg of BioBooster NOC	Minimum:	0.80-0.80
2) recommended and minimum litre of SOS5300 and BioBooster NOC $\!\!\!/$ m3 of contaminated	groundwater	
2/a TPH is below 1 000 microgram/l60 mls + 60 g BioBooster NOC	Minimum:	20-20
2/b TPH is betw 1 000-5 000 microgram/l120 mls + 120 g BioBooster NOC	Minimum:	40-40
2/c TPH is betw 5 000-20 000 microgram/l250 mls + 250 g BioBooster NOC	Minimum:	70-70
2/d TPH is betw. 20 000 - 50 000 microgram/l500 mls + 500 g BioBooster NOC	Minimum:	200-200
2/e TPH is above 50 000 microgram/l500 mls + 500 g BioBooster NOC	Minimum:	200-200
Dosage is also highly dependent on: soil type, pH of water, temperature of water, flow direction and volume, depth of water and de	pth of contaminati	on

PACKAGING INFORMATION:

The product is available in 20 kg safety pails which is the lowest unit for ordering.

STORAGE INFORMATION:

Keep the product in a cool and dry place below 35 Celsius. Avoid exposure to direct sunlight.

