

DEOBAC[®]

Biological Deodorizer and Neutralizer for Municipal Facilities

ODORS IN MUNICIPAL FACILITIES

Aqueous wastes that enter collection systems contain a large variety of organic compounds, some of which may either have obnoxious odors or are capable of combining or degrading to produce odors. Obnoxious odors are more than a nuisance. They affect employee moral and productivity. Scientific studies show that strong odors even can adversely affect people's health! Odors absorb into clothing and can be difficult to remove. They can bring on community complaints and give the utility a bad name. A common approach used to combat odor is odor masking agents, which offer temporary relief but do not eliminate the root cause. As soon as the masking agent drifts away, the odor comes back. A better approach is to eliminate the odor at its source.

THE BIOTECHNOLOGY SOLUTION

Microorganisms, nature's own method of digesting organic waste, are an environmentally sound way to eliminate odors at the source. Microbes, like the ones in DEOBAC Biological Deodorizer, digest organic materials that cause odor. The free enzymes in DEOBAC and the ones secreted by the DEOBAC microbes act as catalysts to chemically alter the odor producing materials.

PRODUCT DESCRIPTION

DEOBAC is a highly concentrated, liquid microbial ecosystem containing specialized natural microorganisms and fortified with free enzymes. It contains a surfactant that improves wetting of odor causing material to improve microbial activity. DEOBAC is formulated for maximum efficiency in the biodegradation of organic odor causing contaminants found in municipal situations.

BENEFITS OF DEOBAC USAGE

- Deodorizes and neutralizes odors at the source.
- Reduces the attraction of insects.
- Not corrosive or hazardous to handle.
- Environmentally friendly approach; does not harm plant or animal life.
- Easy to handle liquid.
- Contains no potentially hazardous *Pseudomonas* bacteria, like some competitive products.
- Contains more microorganisms than most competitive products to provide the most economical treatment possible.

APPLICATION SUGGESTIONS

Application techniques are very important to the success of any biological product. DEOBAC treatment dosage depends on problem size and type, waste type and quantity and wastewater flow and temperature. The Epicore Municipal Distributor can provide further usage suggestions to those below.

(1) Preventative versus Remedial Treatment:

Regardless of the treatment regime selected, a preventative program is strongly recommended over a remedial one. By applying DEOBAC before serious problems develop, a normally operating, odor-free system will be maintained. DEOBAC is suitable for automated metering systems that externally mix product with dilution water. DEOBAC may be pre-diluted for use but DEOBAC dilutions in water have limited stability of about one week so should be used within this time frame.

(2) Initial Purge Treatment:

For established accumulations of odor causing waste, an initial purge is recommended to break-down heavy waste and initiate biological cleaning action. The initial purge step utilizes a higher than normal dose of DEOBAC. For the initial purge, simply pour DEOBAC into the system. A following rinse may be used, if desired. For large systems, it often is useful to pre-dilute the DEOBAC in water to improve distribution.

Reduction of waste and odors indicates a successful purge. When insufficient product is applied, cleaning may be retarded due to insufficient biological action. If this occurs, apply a second purge treatment in 24 hours. The DEOBAC purge treatment rate depends on system type. Starting purge suggestions are indicated in section (5) below.

(3) Exceptionally Heavy Amounts of Fat and Grease:

If grease and fat build-up is exceptionally high, use LIPOSOLVE™ emulsifier to disperse waste to increase the speed of biological action. Use 2 ounces LIPOSOLVE per 15 gallons of water. Follow the LIPOSOLVE treatment with the normal DEOBAC purge treatment.

(4) Maintenance Treatment:

After the initial purge, regular maintenance treatments should be made, as needed. Maintenance doses of 2 ounces DEOBAC should be applied as a one-to-ten warm water mixture. Maintenance treatments are best made during periods of low water usage. Treatment frequency depends on application type and loading. Starting suggestions are indicated below:

(5) DEOBAC Treatment Rate Starting Suggestions:

Application	Purge Treatment Rate (in ounces)	Maintenance Treatment (Number/Week)
Urinals	4	1 - 2
Floor Drains	4	1 - 2
Pot Sink	8	1 - 2
Horizontal Line	4	1 - 2
Stack Vent	4	1 - 2
Janitorial Drain	4	2 - 3
Lift Station	4	3 - 5
Oily puddles	2	-

(6) Incompatibilities:

Harsh chemicals may harm the microorganisms and enzymes in DEOBAC. Use of high concentrations of acid, vinegar, caustic soda, bleach and detergents in conjunction with DEOBAC should be avoided. Also, continuous exposure to water hot (>120°F) will destroy biological action.

PRODUCT DATA:

	<u>Typical Value</u>
pH (concentrate)	6.8 - 7.3
Specific Gravity, 20°C	1.04
Color	Colorless, translucent
Odor	Sweet, mild soapy
Flash Point	>200°F

PRODUCT PACKAGING

DEOBAC is supplied in cases of ten quart plastic bottles that contain 2.25 pounds net weight each.

PRODUCT STORAGE

Biological products are unlike inert chemical products. They require special treatment during storage and handling,

- Do not store continuously at temperatures above 40°C (104°F).
- Store out of direct sunlight in a well-ventilated area.
- Do not let diluted product stand more than one week before use.
- Do not mix with any materials not recommended by Epicore, especially disinfectants and harsh chemicals.

SAFETY

DEOBAC utilizes natural microorganisms that are harmless to humans, plants and animals. DEOBAC does not contain genetically altered microorganisms. DEOBAC contains no toxic or hazardous chemicals, acids, caustics or solvents. It is not corrosive to metal, ceramic and plastic. Users are advised to consult the Material Safety Data Sheet for further information and guidance.

Epicore BioNetworks Inc. Contact Information

Epicore Networks (USA) Inc.
4 Lina Lane
Eastampton, New Jersey, USA, 08060
Telephone: (609) 267-9118
Fax: (609)

267-9336
epicore@gbsias.com

E-mail:

IMPORTANT NOTICE TO PURCHASER:

“Epicore BioNetworks, Inc. (“Epicore”) warrants that the product conforms to its compositional description and is reasonably fit for the purpose stated on the label when used in accordance with the label instructions under normal conditions of use. There are no other express or implied warranties, whether as to merchantability, fitness for any use, or otherwise, given in respect of the product. Neither Epicore nor its agents shall be liable for any damage, loss, or injury, whether the same arises directly or consequentially, by reason of any matter whatsoever relating to the use of the product, and any buyer’s or user’s exclusive remedy in any instance shall be limited to a refund of the purchase price paid.”

DEOBAC is a trademark of Epicore BioNetworks Inc.

7/01

©2001 Epicore BioNetworks Inc.