

C-5 Odor Neutralizer

Our Cozymase-based technology for instant odor removal, and odor prevention



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PRODUCT DESCRIPTION

C-5 Odor Neutralizer is an all-natural, botanical product formulated to digest odor producing compounds generated from the decomposition of organic materials. The odor producing compounds are organic compounds containing Sulphur or Nitrogen functionality, which are usually based on Organo-Sulphur compounds such as Hydrogen Sulphide, Mercaptans, Sulphides and Disulphides. Other odor creating compounds are based on Organo-Amines, such as Cadaverine, which is Penta-methylene Diamine. This compound is generated by microbial decarboxylation of Lysine. Some of these compounds include the Mercaptan family of compounds, which are Sulphur based. The Amino functional Hydrocarbons of low molecular weight also create some petrifying malodors.

The decomposition of organic compounds usually creates Hydrogen Sulphide, but also creates Cadaverine, which is a Hydrocarbon Diamine. These compounds are produced when the bacteria digest the organic proteins in an anaerobic environment. This causes the bacteria to pull off the Oxygen atoms on the amino acids of the proteins causing the production of Sulphides, Mercaptans and Amino Hydrocarbons.

The mode of action of the C-5 is to change the Biochemical pathway generating the odor creating compounds. Many times, in anaerobic conditions microbes strip off Oxygen from Sulphates and release Hydrogen Sulphide as a by-product. C-5 changes the pathway allowing for Anaerobic respiration to occur through another pathway that does not release Sulphides or Amines as by-products. C-5 Odor Neutralizer changes the environment to digest the proteins and fats down another biochemical pathway that does not produce the reduction by-products which cause odor production. Any Ammonia or Hydrogen Sulphide present is digested by the live Cozymase System found in C-5 Odor Neutralizer, which uses these compounds as fuel for its cellular functions.



C-5 is not a masking agent or an encapsulation product. It works at the molecular level at the source of the generation of the odor creating compounds.

C-5 ODOR NEUTRALIZER – FIELDS OF APPLICATION

- Odor reduction in municipal wastewater canalisation systems, and pumping stations
- Increasing odor removal capacity of biofilters, regenerating filter material
- Deodorizing solid wastes in households, and landfills
- Deodorizing liquid manure, and solid wastes in agriculture

BENEFITS OF C-5 ODOR NEUTRALIZER

- Significantly reduces or eliminates H₂S, NH₃, Mercaptan gas formation
- Highly efficient and effective against numerous odors
- A true odor-elimination product with immediate action
- Broad range of applications on liquid, and solid wastes
- Biodegradable, non-toxic and non-hazardous

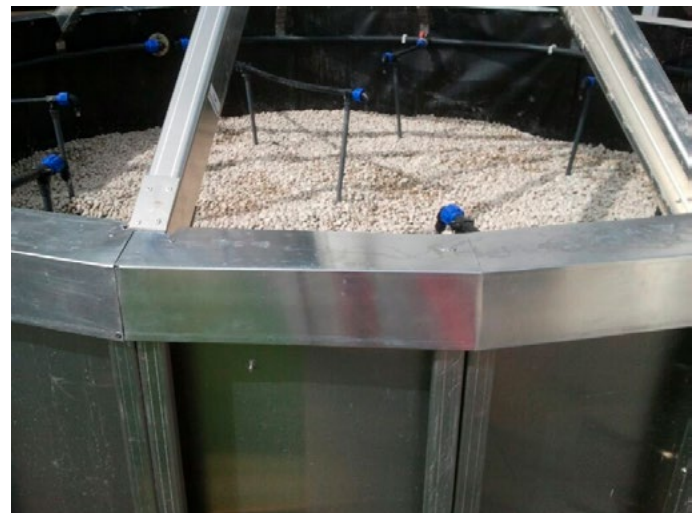


C-5 ODOR NEUTRALIZER IN WASTEWATER SYSTEMS

INCREASING ODOR REMOVAL CAPACITY OF BIOFILTERS IN PUMPING STATIONS

Unpleasant odorous gases coming from the digested wastewater often cause odor and corrosion problems in lift stations. The cause of Hydrogen Sulphide and Ammonia formation in sewage systems is usually high retention time, which enhances rotting of wastewater. The adsorption capacity of the applied odor filters is often not sufficient, and the unpleasant smell may lead to several complaints from citizens of the affected area.

C-5 Odor Neutralizer is a liquid natural botanical product formulated from natural materials designed to digest odor-producing compounds that derive from decomposing organic matter. The product is composed of different natural botanicals, enzymes and microbes, which adhere to the filter-surface to eliminate the unpleasant smell effectively.



The strong smell in the wastewater can be derived from the decay of organic materials. These compounds typically contain Sulphur or Nitrogen (also including Sulphur-based Mercaptan compounds, and short-chain fatty acids including Amino group). In this case smell is caused mostly by the anaerobic bacteria, which break down proteins and other organic materials, because these microorganisms get to breathe the oxygen from the amino groups of the proteins.

C-5 Odor Neutralizer changes the environment to digest the proteins and fats down another biochemical pathway, significantly reducing odorous gases. The biofilm on the filter surface absorbs and breaks down the formed Hydrogen Sulphide and Ammonia in an enzymatic pathway, and significantly improve the odor elimination capacity of the biofilter.

Dosage information: Create a 5-time dilution of the product with pure water. Depending on the volume of the filter material in the biofilter, make sure to spray the diluted product throughout the entire area of the filter material, and make sure the diluted C-5 stream flows through the entire volume of the filter material downwards. Make sure the filter material is impregnated well with C-5. Repeat the treatment when necessary.

PREVENTING ODOR FORMATION IN SEWAGE SYSTEMS, H₂S, NH₃, MERCAPTAN REDUCTION

The dosage of the concentrated version of C-5 in wastewater lines where the hydraulic retention time for the raw municipal wastewater is high, can significantly reduce the formation of Hydrogen Sulphide, Mercaptans, and Ammonia if dosed upstream. By the application of C-5 in municipal wastewater systems, the odor complaints of inhabitants living near pumping stations can be addressed, as well as the corrosion problems of the pumping station's metal, and concrete parts caused by H₂S can be significantly reduced.



Dosage information: Dose the undiluted, concentrated version of C-5 upstream before the high-HRT part of the system begins to maximize the effect in odor control. If you do so, you are able to use the preventive part of C-5 technology, not just the direct odor removal ability, which is more economical in material usage.

Week 1: 6-16 ppm depending on HRT, and COD load, based on wastewater daily flowrate in m³/d which flows through the pumping station where the product is dosed.

Onwards: 2-12 ppm depending on HRT, and COD load.

C-5 ODOR NEUTRALIZER IN LANDFILLS, AND HOUSEHOLDS

C-5 Odor Neutralizer is an instant odor control product if applied on solid wastes, or odorous surfaces. Once C-5 is sprayed evenly on the odorous surface, the Cozymase system immediately starts the digestion of odorous gases, and the surface stops releasing smell right after the treatment.

C-5 is widely used in municipal scale by people deodorizing their dust bins at home, as well as by landfill operators to deodorize solid waste at landfills.

C-5 can be applied at any surface of wastes releasing odorous gases due to rotting organic content.



Dosage information: Dilute C-5 Odor Neutralizer 5-10:1 with water (dilution ratio depends on type of waste). Spray onto the waste, care to cover the surface evenly with the spray. Spraying frequency depends upon the accumulation rate of waste products causing the odor. One liter of diluted material will cover etc. 20 square meter area.

C-5 ODOR NEUTRALIZER IN ANIMAL FARMS



Our C-5 Odor Neutralizer technology is suitable for deodorizing and reducing Ammonia and Hydrogen Sulphide of the litter in deep-litter swine and poultry farms. The application has several benefits: besides odor reduction, the necessary medication of the livestock is supposed to be reduced. Ammonia and Hydrogen Sulphide gases are harmful to the lungs of the animals, which result the application of various medicines in a reasonable amount. Their presence lead to inadequate growth and development of animals, and sometimes even increased mortality and reduced yields.

Therefore, application of C-5 Odor Neutralizer delivers great performance in odor reduction, and indirectly the healthier living environment of animals may reduce the amount of medicines applied, increase the reproduction rate, and reduce the mortality, which means net profit for the farmers. So, the cost of the C-5 application cannot be considered as an extra expense, moreover the benefits deriving from the product's application can lead to greater economical profit than the price of the product applied for a whole year.

C-5 also can be used for deodorizing manure piles, and other organic wastes formed in farms.

Dosage information: 1 litre of C-5 Odor Neutralizer concentrate is enough for the treatment of 100 m² of odorous litter after 1:5-time dilution with pure water. As the product is not harmful to animals, it can be applied even at their presence.

IMPORTANT INFORMATION

Dosage of C-5 at wastewater systems for odor prevention 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. [Click here](#) for more information on the Malatech-C Dosing Unit!

Whenever you have any questions, or you need our help in determining exact dosages for your application, do not hesitate to [contact us!](#)

PACKAGING INFORMATION

The product is available in 19 litre safety pails which is the lowest unit for ordering.

STORAGE INFORMATION

Keep the product in a cool and dry place below 28 Celsius. Avoid exposure to direct sunlight.