

# Rapidzyme

**A bacteriological-enzymatic compound that accelerates the breakdown of fats, protein and cellulose.**

- Advantages**
- A product with a totally harmless application.
  - It accelerates the breakdown of organic material.
  - Clears blockages
  - It considerably reduces bad smells and other disturbing consequences.
  - It reduces ammonium levels.

- Composition**
- Anaerobic bacteria:  
The necessary micro organisms for the digestion of organic matter in the absence of air.
- Aerobic bacteria:  
The necessary micro organisms for the digestion of organic matter in the presence of air.
- Amylases:  
These act on the carbohydrates (starches), turning them into dextrin's and soluble sugars.
- Proteases:  
These turn the proteins into polypeptides and soluble amino acids.
- Lipases:  
Their activity is developed on the greases, turning them into acids and soluble glycerol's.
- Cellulases:  
These act on the cellulose, turning it into soluble sugars.
- Activators:  
These are products that synergically increase the activity of the enzymes, accelerating degeneration reactions.
- Wetting Moisturising agents:  
These have the function of increasing the contact between the enzyme and the waste material, enhancing a fast action.

**Dose** 1 Kg. of Rapidzyme per 20m<sup>3</sup> of holding tank.  
This dose is recommended as a first load, repeat dosing to be applied every 25 days.

The doses are by way of guidelines, as in each case it is necessary to consider the characteristics of each pit or drain, as well as the volumes, amount and kind of waste, the time needed for emptying and a whole series of factors that are out of our control.

**Form of use** Dissolve Rapidzyme in warm water not exceeding 40 °C in a drum and leave to rest for 20 minutes, 30 at most.

For large storage systems stir and add as much water as possible to dilute and spread or mix Rapidzyme over the tank surfaces.

**Introduction** Organic waste is made up of proteins, carbohydrates, fatty materials and fibres, which solidify and make it difficult to liquefy and reduce them. The insoluble solids and suspensions element are particularly difficult to break down. As a result, the solid build up and cake must be liquefied outside the bacterial cells and through the action of enzymes segregated by special bacteria.

The enzymes are protein biocatalysts produced by all living cells, which catalyse the specific biochemical reactions that turn the proteins, hydrocarbons, fats and fibres into products necessary for the cellular metabolism. Once the cellular metabolism has been produced, the bacteria multiply and secrete enzymes that digest more waste material. In essence, a biological chain reaction begins that can continue until all the organic material has disappeared.

Rapidzyme is a compound of aerobic and anaerobic bacteria necessary for the molecular metabolism of the bacteria. Therefore, it works as a biological activator that breaks down the residual organic matter by enzymatic means.

**Characteristics** Pits and drains do not have sufficient oxygen and have an unusually high biological demand for oxygen. As a result, they give off bad smells. With Rapidzyme it is possible to reduce the B.O.D. by breaking down the waste and reducing foul smells.

Rapidzyme contains materials that increase the activity of the enzymes, such as salts, humectants, energetic products that catalyse and accelerate decomposition reactions, and humidifiers to increase the contact between enzymes and the waste materials.

The formula of Rapidzyme complies with the principle of waste retention until the bacteria can digest the solid materials. In this way, only the materials made soluble can flow from the pit or be easily absorbed.

Rapidzyme contains pH buffer materials, however, it is best not to send large amounts of acids or alkalis to the pit. Temperature enhances the action of Rapidzyme provided it does not exceed 40 °C. The lower the temperature, the lower the speed with which the waste is broken down.

**Precautions** Keep the containers closed. When half a bag is used by reason of the dose, the bag must be folded several times and clamped and kept in a refrigerator. Keep out of the reach of children.

**Presentation** Box containing 8 bags of 1 Kg.

**Properties** Form: Fluid powders  
Colour: Toasted  
Smell: Pleasant

**Advantages** Suppression of crusts in the pits.  
Great reduction of smells and flies.  
Disappearance of harmful gases (reduction of ammonia level).  
Easy emptying of the pits for easy application on crops.  
Fast penetration into soakaways, without corrosive effects.  
Prevents blinding screens.  
It reduces emptying costs.