



## custom enzymes

### CUSTOM E DESULPHUR

Enzyme formulation for the removal of Sulphur

#### INTRODUCTION:

Sulfates and metals are the most common pollutants in wastewater. Sulfate containing wastewater is generated from food, paper and pulp, petroleum industries and mining. Currently SO<sub>2</sub> is treated separately, resulting in a large work area requirement, the need for complicated equipment, and high investment and operation costs. The simultaneous desulfurization microorganism technology, which is characterized by its simplicity, lower costs, availability of by-products and good technology performance, is currently one of the flue gas treatment technologies being developed. Simultaneously biological removal of SO<sub>2</sub> from waste is carried out using sulfate-reducing bacteria (SRB) and sulfide-oxidizing bacteria (NR-SOB). NR-SOB uses sulfide as the electron donor, whereas it uses NO as the electron acceptor. While sulfide is oxidized as sulfate, NO is reduced to N<sub>2</sub>. The desulfurization reaction products can be controlled as elemental sulfur by adjusting the reaction conditions to reduce pollution and to obtain economic benefits.

#### BENEFITS:

- Elimination of sulfide and H<sub>2</sub>S into simpler forms
- Removes bad odor
- Easier to balance the treatment system
- 100% organic and water-soluble base

The use of diverse bacterial consortia in the microbial sulfate reduction process has some advantages compared to the use of pure cultures, such as a lower risk of contamination by other organisms and enhanced adaptation to changes in conditions. In addition, in mixed consortia the utilization of substrates is more comprehensive than in single strain cultures. A high diversity of bacteria also allows the degradation of a larger variety of organic contaminants.

**SPECIFICATIONS:**

- Colour: Off white coloured powder
- Composition: Selected Blend of enzymes
- E. coli: Absent/25g
- Salmonella: Absent/1g
- Toxins: Absent/1g
- Pathogens: Absent

**STORAGE AND SHELF LIFE:** Store the product in a cool, dry and shaded place with temperature under 38 °C, away from direct sunlight. The shelf life of the product under recommended conditions is for the period of 1 year. Enzyme dust may cause irritation when inhaled. Unnecessary contact with the product must be avoided. **PACKING:** The packing can be customised as per the requirement.