

# Solzymes

**Technical Data Sheet** 

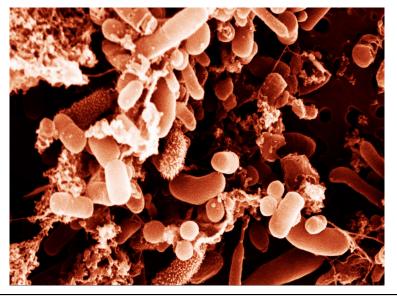
Soilzymes are formulated with bacterial strains targeted for the treatment of soils, waste water treatment plants, oily sumps, grease pits and holding tanks containing hydrocarbons, as well as affected ground/soil areas. Soilzymes are effective in the reduction of organic matter.

Soilzymes help to accelerate in the release of plant available nutrients which are vital to the nutrient cycle. Soilzymes are simple and easy to apply and can be quickly blended with additional soil amending products like Soil Medic.

Soilzymes also contain targeted strains of bacteria that make them effective for biological wastewater treatment of refinery and petrochemical wastes. This concentrated liquid enhances organic removal efficiency in biological systems, providing lower effluent BOD, COD, and TSS.

## FEATURES AND BENEFITS:

- Increase reaction rates for organic matter decomposition
- Accelerated release of plant available nutrients that aid in nutrient cycling of elements like nitrogen, phosphorus and sulfur
- Improved energy for microorganisms
- Reduces the accumulative effect of chemicals that are harmful to the environment which inhibit soil enzyme activity
- No toxic; non hazardous; non mutagenic
- Improves over-all soil quality thus providing a foundation for environmental quality and sustainable use
- Targeted formula for biological wastewater treatment of refinery and petrochemical wastes



# TYPICAL PHYSICAL PROPERTIES:

Appearance and C	olor Natural(tan)
Form	Free Flowing Liquid
Fragrance	Citrus
Bacterial Content	Proprietary blend of Bacillus Spores
Nutrient Content	Biological nutrients, surfactants and stimulants

### DIRECTIONS FOR USE:

Waste Water Treatment Plant : Dilute 5:1, then apply:

Flow Rate	Initial Dosage	Maintenance**
Up to 1,000 gpd	$\frac{1}{2}$ gal. per day for 3 days	½ gal. per week
Up to 5,000 gpd	$\frac{1}{2}$ gal per day for 3 days	l gal. per week
Up to 20,000 gpd	5 gal.*	1½ gal. per week
Up to 50,000 gpd	8 gal.*	2 gal. per week
Up to 250,000 gpd	15 gal.*	¼ gal. per day
Up to 500,000 gpd	25 gal.*	½ gal. per day
Up to 1 mgd	50 gal.*	l gal. per day

- $\boldsymbol{\ast}$  Spread this initial dosage out over the course of 10 days.
- \*\* Add as regularly as possible. If it is required to miss one day, add that day's product with the next dosage. Dosage rates will vary with flow rates, retention times and system variations.

# STORAGE /HANDLING/PACKAGING:

Store **Soilzymes** in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area. Do not freeze or heat above 110°F. Keep away from incompatible materials (See SDS) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Keep away from children.

Wear eye and skin protection. Wash hands after handling. Avoid discharge to natural waters. Small spillages can be washed away with large amounts of water. Large spillages, if contained, can be returned to container.

Soilzymes is shipped in 5's, 55's or 275 gallon totes.

Recommendations given in this data sheet are based on tests believed to be reliable. However, the use of the information is beyond the control of Heartland Energy Group, Ltd. and no guarantee, expressed or implied is made to the results obtained if not used in accordance with directions or established safe practice. The buyer must assume all responsibility, including injury or damage from the misuse of the product as such, or in combination with other materials. This bulletin is not to be taken as a license to operate under or recommendation to infringe any patent.

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