

Biodegradation of Sulfur Compounds © 2010

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ECOPROBIOTICS® of the Bacta-Pur® System, are beneficial communities of natural bacteria, which have been on earth for millions of years and have been selected for their synergistic ability to biodegrade pollutants and to improve water quality. ECOPROBIOTICS® increase biodiversity. Just as people take probiotic yogurt for its' ability to assure the presence of the optimal community for digestion and immunity, ECOPROBIOTICS® improve ecosystem health. EVERY PRODUCTION of Bacta-Pur® products is analyzed and cleared for shipment ONLY after passing all performance tests and being CERTIFIED PATHOGEN FREE using techniques from the food industry. ECOPROBIOTICS® are purely natural and beneficial; they NEVER contain added chemicals such as surfactants, emulsifiers or enzymes..., nor do they contain genetically modified (GMO) or deliberately mutated organisms. ECOPROBIOTICS® are safe and beneficial. Disease causing organisms are never used, as others do or permit. All bacterial cultures in Bacta-Pur® products are listed on the Canadian DSL.

Summary	
SYMPTOMS	TREATMENT BENEFITS
<ul style="list-style-type: none"> • noxious odors from mercaptans or sulfides • high sulfur concentrations 	<ul style="list-style-type: none"> • eliminate causes of noxious odors • reduce sulfur levels biologically

Why the Bacta-Pur® System is Effective in Degrading Sulfur Compounds

Bacta-Pur® H2000 contains a community of natural beneficial microorganisms, which have been selected for their synergistic ability to produce essential enzymes for the biodegradation of mercaptans and other sulfur containing compounds with complex bonds.

Our on-site preconditioning techniques assure that

- the microorganisms are preadapted to the specific combination of compounds entering each day,
- the microorganisms are in exponential growth upon addition, and
- the concentration of the preconditioned microorganisms is up to a million times more concentrated than background levels of microorganisms in untreated systems.

When necessary Bacta-Pur® INDUSTRIAL NUTRIENT PACKAGE can be used to ensure the presence of essential minor nutrients for efficient biodegradation.

Reduction of Sulfur Concentrations

Bacterial metabolism incorporates sulfur, carbon, nitrogen, phosphorous and other required compounds into new cells. This effectively removes some of the problematic sulfur compounds from the system, reducing the level of sulfur as well as making it unavailable to form hydrogen sulfide (H₂S).

Bacta-Pur® products contain no sulfate reducing bacteria, therefore, no H₂S is produced by Bacta-Pur® H2000.

Preventive Maintenance with Bacta-Pur®

Enzymes produced by the microorganisms are already in the bottle, and more will be produced within the system as the microorganisms biodegrade the accumulated wastes.

Bacta-Pur® is uniquely effective because of the BACTIVATOR®[ⓓ], which is an on site growing and conditioning system. The beneficial microbes are continuously adapted to the site-specific products (often changing) in the wastewater stream.

