

BIO-STAR™ Industrie

Industrial wastewater treatment

Bio-STAR™ Industrie is a blend of natural occurring bacteria selectively adapted to degrade a wide range of chemical compounds found in industrial wastewater. Its concentrated formula attacks phenolic compounds, hydrocarbons, surfactants and other industrial wastes in an effective way. It is also very effective to reduce ammonia concentration and improves the biological treatment processes.

Bio-STAR™ Industrie is made of a synergistic blend of Bacillus and Pseudomonas, nutrients and a natural catalyst which stimulate the bacterial growth. These bacteria make a highly specialized consortium and were selected for their complementarities and their superior digestive capacities to degrade industrial waste. Their performance is both remarkable in anaerobic and aerobic environment.

All its components are registered on Canada's Domestic Substance List (DSL) and **Bio-STAR™ Industrie** subscribes to the very principles of sustainable development.



APPLICATIONS:

- Steel industry
- Pulp and Paper industry
- Textile industry
- Pharmaceutical sector
- Food processing sector (dairy, fruits, chicken, vegetable oil, starch ...)
- Chemical sector (paint, phenolic resin, rubber, lubricant ...)
- Landfill leachate
- Soils contaminated with hydrocarbons

CHARACTERISTICS:

- Degrades a wide range of chemical compounds.
- Improves the rates of organic removal as measured in BOD/COD/TOC.
- Reduces nitrifiers toxicity to initiate and maintain high rate of biological ammonia removal.
- Improves degradation of solvents, mineral oil, pharmaceuticals and surfactants.
- Increases the rate of biomass growth and carbon utilization during organic overload.
- Reduces the emission of bad odors by attacking organic acids and organic sulfur compounds.

Bacterial count	5 x 10 ⁹ cfu/gram
Bacteria Type	Blend of Bacillus and Pseudomonas
Biological pathways	Facultative anaerobic and aerobic
Enzyme production	Lipase, protease, amylase, cellulase
Pathogenic bacteria	Salmonella/Shigella free
pH range	5.0 - 8.0
Temperature range	5°C - 45°C
Appearance	Tan-colored powder
Stability	1 year (2° - 35°C)

METHODOLOGY

The powder can be added directly to wastestream but we recommend prehydration for applications with short retentions or where toxicity or temperature or pH change would produce a shock to microbes. Prehydrate 30 to 90 minutes prior to addition to the system, using 8 liters per 0,5 kg of bacteria. For best results, the make up water should be between 20°C and 30°C.

This product is available in powder, water-soluble sachets and in Bio-Sac. Consult our specialists to determine the right dosage.

STORAGE AND HANDLING

Keep in a cool and dry place. Avoid contact with skin and eyes. Wash hands with water and soap after each use.