



SYMBIO 200 RANGE OF INDUSTRIAL BACTERIA

Uses:

- Biological Degradation of Organic Pollutants in liquid and solid waste and soil.

Liquid Waste

Generally 4 grams of Symbio 200 per 10kgs of COD entering the system per day. For detailed application or special cases, please consult our technical services.

Dissolve the Symbio 200 in lukewarm water (30°C to 40°C). 1kg of Symbio 200 requires a minimum of 10 litres of water. After 30 minutes of activation (preferably with continuous aeration and or agitation), stir the active solution and add it to the waste water or effluent to be treated.

The products within the Symbio 200 series may be mixed with each other to degrade a cocktail of pollutants, or used to boost remediation with a biofixation from our 400 series.

The 200 series can be applied to any part of a waste water treatment system that provides sufficient retention time as well as interceptors and drainage systems. They are also used to depollute contaminated soil. Please consult our technical services team for advice on product application and dosage.

Soil Decontamination

Microbes from the Symbio 200 series may be used to degrade organic pollutants in the soil. The bioremediation programme for each project is determined on a case by case basis by our technical services.

Action

The micro-organisms degrade complex long chain molecules to facilitate natural degradation.

Composition

Each of Symbio's 200 series comprise a compound of nutrients, starter enzymes and selected strains of micro-organisms able to degrade specific organic contaminants.

Health & Safety

Composition

Powder. Contains saprophytic micro organisms conforming to EC EFB Class 1 requirements. Class 1: 'This class contains micro organisms which have never been described as causal agents in human illness and which pose no threat to the environment.' Activating nutrients, organic nitrogen and phosphates.

Fire Risk

None

Accidental Release

Rebag powder or wash to drain

Storage & Handling

Store away from heat & humidity. Fine powder, when packing wear mask and gloves.

Physical & Chemical Properties

Powder, ph 8 – 8.5. Soluble in water

Stability/Reactivity

Stable

Toxicological Data

Non toxic contains saprophytic micro organisms and associated nutrients plus small quantities organic nitrogen and phosphate.

Ecological Data

Common saprophytic micro organisms are harmless to flora and fauna.

Transport Data

No special precautions

Health & Safety Data

Statutory risk phrases – None

Recommended safety phrases

Keep out of reach of children
Avoid inhalation

Safe Handling

Of no danger but may cause a mild reaction in people allergic to similar products

First Aid

Inhalation – Breathe in fresh air, if by mouth rinse with water
Ingestion – Do not drink water seek medical advice
Eye contact – rinse with water
Skin contact – rinse with water
If irritation occurs and persists seek medical advice

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SYMBIO 200 RANGE OF INDUSTRIAL BACTERIA

Composition

Each of Symbio's 200 series comprise a compound of nutrients, starter enzymes and selected strains of micro-organisms able to degrade a wide range of organic pollutants. Specific products solve specific problems.

Code No.	Product	Waste Treated	Applicable Industries
201	SYMBIO BENZOIL	Phenol, halo-hydrocarbon, benzene, trimethylamine, ethanol, chloroethane and formaldehyde	<i>Agriculture/foodstuffs, canning, brewing, baking, petroleum and formaldehyde synthesis.</i>
202	SYMBIO PHECREL	Phenol and cresol	<i>Coal, paper mills, dyeing tanneries</i>
203	SYMBIO TRYGLIN	Triglyceride grease and naphthalene hydrocarbons	<i>Dairy/cheese soap/oil wool, meat packers, petrochemical</i>
204	SYMBIO SURFACT	Non ionic, anionic and cationic surfactants	<i>Sewerage treatment - problems caused by filamentous bacteria quaternary ammonium</i>
205	SYMBIO FIBRE	Lignin and cellulose.	<i>Agriculture/foodstuffs, starch, pulp/paper, straw/compost, spinning/textile tanneries</i>
206	SYMBIO BICHLOR	Chloro-hydrocarbons and biphenyls	<i>Petrochemical, metallurgical solvent and power plants</i>
207	SYMBIO CHLOROPHE	Chloro-hydrocarbons and chlorophenols	<i>Agriculture/foodstuffs, sugar refining, abattoirs, tanneries</i>
208	SYMBIO OIL	Oil, grease, hydrocarbons sulphur and crude oil by-products	<i>Petroleum, rubber, sulphur, agriculture/foodstuffs, urban and industrial WWT</i>
209	SYMBIO CYAN	Cyanide by products	<i>Metallurgical</i>
210	SYMBIO PAL	Grease, fat and organic sulphur in low oxygen conditions	<i>Drains, grease sumps, filters</i>
211	SYMBIO FEROil	Protectional prevention of corrosion from sulphur reducing and ferrous bacteria	<i>Petroleum, transport, metallurgy</i>
212	SYMBIO NH4	Improves nitrification. Transforms NH4 to NO3	<i>Fertilisers - landfill leachate, sewage treatment</i>
213	SYMBIO PAH	Poly aromatic hydrocarbons	