

Safety Data Sheet

MSDS-Bi-eng-09

Amended according to Directive (EEC) 1907/2006 (REACH)

7	Handling and Storage	
	Handling	
	Safety Precautions	Do not inhale dust. Avoid contact with the product.
	Environmental Precautions	Keep product away from waters.
	Fire and Explosive Protection	none
	Storage	
	Storage Conditions	Store in original package only. Sealed packages can be stored for at 12 months at temperatures below 4 °C.
Advices for Storage with other Products	None	
Other Information on Storage	None	
8	Exposure Controls / Personal Protection	
	Exposure limit values	none
	Maximum Concentrations at Operator's Position	none
	Personal Protective Equipment	none
	General Protection	Avoid any contact with the product.
	Inhalative Protection	Use with adequate ventilation to prevent dust inhalation.
	Skin Protection	not necessary
	Eye Protection	not necessary
	Hygiene Recommendations	Wash hands after contact with the product.
Environmental Exposure control	no danger by default; avoid exposure to waters	
9	Physical and Chemical Properties	
	General information	
	Appearance	physical state: powder colour: dark violet
	smell	none
	Important health, safety and environmental information	
	pH value	product: not relevant in water [100g/l at 20 °C]: 6 – 7
	Boiling point [°C]	not relevant
	Flashpoint [°C]	not relevant
	Flammability	not flammable
	Explosive Properties	not tested
	Vapour pressure	not relevant
	Oxidizing Properties	none
	Bulk Weight [kg/m ³ at 20 °C]	351 (Density); 459 (Tab Density)
	Solubility/Miscibility in Water	unsoluble / dispersible in water
	Viscosity	not applicable
	Vapour Density	not relevant
	Evaporation Rate	not relevant
	Other information	
	Melting Point [°C]	not relevant
	Freezing Point [°C]	not relevant
Auto ignition [°C]	no autoignition up to 500 °C	
10	Stability and Reactivity	
	Thermal Decomposition / Conditions to be Avoided	Do not store under wet conditions, avoid long term exposition to temperatures above +20° C.
	Hazardous Reactions	susceptible to fungicides, acids and hydroxides, products attacking organic material
	Hazardous Decomposition Products	none
	Other Information	none

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11	Toxicological Information	
	Acute Toxicity	LD50 intraperitoneal: rat: > 4 x 10 ⁹ spores/ kg animal weight LD50 dermal: rat: > 4 x 10 ⁹ spores/ kg animal weight LD50 acute oral: rat: > 4 x 10 ⁹ spores/ kg animal weight Pulmonary Toxicity/Pathogenicity: rat: > 2.5 x 10 ⁸ spores per animal LC50 inhalative: rat: > 8 x 10 ⁷ spores per animal Skin irritation: rabbit: > 1 x 10 ⁹ spores per ml water on skin Acute eye irritation: rabbit: > 4.48 x 10 ⁸ per eye sack
	Sensitisation	guinea-pig: > 1 x 10 ⁹ spores per ml water on skin
	Genotoxicity	Mutagenicity in-vitro: bacteria: non-mutagenic Mutagenicity in vivo: mouse: non-mutagenic Micro-Nucleus: mouse: non-clastogenic (OECD 474)
	Practical Experiences	Observations for Classification: none Other Observations: none
12	Ecological Information	
	Ecological Effects	toxicity to aquatic organisms: acute toxicity / fish: > 100 mg/L, 96h (OECD 203) acute toxicity / daphnia: > 100 mg/L, 48h (OECD 202) acute toxicity / algae: > 100 mg/L, 72h (OECD 201) effects on water plants: not available
	Effects on Waste Water Treatment	not available
	Mobility	none
	Persistence and degradability	physical/chemical: thermal combustion at 600 °C without any residues or hazardous products biological: readily biodegradable
	Bioaccumulative Potential	none
13	Disposal	
	Product	Spray remaining product dispersed in liquid manure. Small amounts can be added to compost.
	Packages	Recommendations: Add empty packages to local waste disposal or recycling system. Cleaning Agent: no special cleaning necessary
14	Transport Information	
	Transport Conditions	land: no restrictions sea: no restrictions air: no restrictions
	Other Information	none
15	Regulatory Information	
	EEC Classification	none
	Hazard Symbol / Labelling	none
16	Other Information	
	R-phrases	none
	S-phrases	none
	Other Regulations	none
	The purpose of the above information is to describe the product only in terms of health and safety requirements. The information given should not, therefore, be construed as guaranteeing specific properties or as a specification. Customers should satisfy themselves as to the suitability and completeness of such information for their own particular use.	
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