

MSDS AS PER GHS GUIDELINES

Date: Nov 2017

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE PRODUCT AND COMPANY

1.1. Product Identifier	BIOBACT
1.2. Relevant identified uses of the substance or mixture and uses advised against	Odor control, Sewage Treatment, Bio-degradable effluent and Waste water treatment.
1.3. Details of the Supplier of the safety data sheet	Contact details: Gamyam Bio & Renewable Solutions Pvt. Ltd. # 6-3-1099/1/14 & 15, 6 th Floor, Lake Melody Towers, Raj Bhavan Road, Somajiguda, Hyderabad, India - 500082. URL: www.biobact.com
1.4. Emergency telephone numbers	Phone: +91 9030088981, 9652450007
1.5. Email address of Technical person	Email : ravi@biobact.com, sales@biobact.com

2. COMPOSITION & INFORMATION ON INGREDIENTS

2.1. Chemical Identity	A powder having a Combination of Peroxide based complex and catalyst.
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3. HAZARD IDENTIFICATION

3.1. Emergency overview	Toxicity effects principally related to its irritating properties. Does not present any significant hazard for the environment.
Potential health effects	
General	Irritating to mucous membrane, eyes and skin.
Inhalation	Slight nose and throat irritation at high concentrations, cough in case of repeated or prolonged exposure, risk of sore throat, nose bleeds, chronic bronchitis.
Eye contact	Severe eye irritation, watering and redness, can cause burns to the eye. Risk of serious or permanent eye lesions Slight irritation. In case of repeated contact: risk of dermatitis.
Ingestion	Severe irritation of the mouth, throat, esophagus and stomach. Bloating of Stomach, belching. Nausea, vomiting and diarrhoea.

GAMYAM BIO & RENEWABLE SOLUTIONS PVT. LTD.

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4. FIRST AID MEASURES

General Recommendations	Do not dye soiled clothing near an open flame or incandescent heat source.
Inhalation	Remove the subject from dusty environment. Consult with a physician in case of respiratory symptoms.
Eye contact	Flush eyes with running water for 15 minutes, while keeping the eyelids wide open. Consult with an ophthalmologist in all cases.
Skin contact	Remove contaminated shoes, socks and clothing; wash the affected skin with running water. Clean clothing. Consult a physician in case of persistent pain or redness.
Ingestion	Consult with a physician in all cases If the subject is completely conscious, rinse mouth and administer fresh water. Don't induce vomiting. If the subject is unconscious, loosen collar and tight clothing, lay the victim on his/her left side, give nothing by mouth. Keep warm with blanket. Don't induce vomiting.

5. FIRE FIGHTING MEASURES

Flash point	Not applicable
Flammability	Non-flammable
Auto-ignition temperature	Not applicable
Danger of explosion	Non-explosive
Common extinguishing methods	Water
Specific hazards	Oxidizing substance. Oxygen released on exothermic decomposition may support combustion. Pressure burst may occur due to decomposition in confined spaces or containers.
Fire fighting instructions	Evacuate all nonessential personnel. Personnel should wear normal protective equipment (full bunker gear) and positive pressure self-contained breathing apparatus. Intervention only by capable personnel who are trained and aware of the product. If safe to do so, remove unaffected product to a safe area.

6. ACCIDENTAL RELEASE MEASURES

Precautions	Observe the protection measures given in sections 5 and 8. Avoid materials and products which are incompatible with the product (see section 10) Avoid direct contact of the product with water.
Clean up procedure	Collect the product with suitable means, shovel or sweep avoiding dust formation. All receiving equipment should be clean, dry, vented, labelled and made of material that is compatible with the product. Don't return spilled or contaminated material to inventory. Clean the area with large quantities of water. For disposal methods, refer to section 13.

7. HANDLING AND STORAGE

Handling	Clean and dry process piping and equipment before using this product. Never return unused product to original storage container. Keep away from incompatible products. Containers and equipment used to handle the product should be used exclusively for that product. Avoid any contact with water or humidity. For more information, consult the supplier.
Storage	In a dry area. Protect from direct sunlight. Keep away from heat sources Keep away from reactive products (see section 10). Store in vented containers Store at temperature less than 40°C (104 °F)
7.3. Incompatible packaging materials.	Advised to use original containers only. Avoid materials prone for rusting.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering controls	Provide ventilation in work areas when necessary to minimize dust and irritation and to comply with the following applicable limits:
Eye/face protection	Dust proof chemical goggles.
Hand protection	Protective gloves-chemical resistant
Recommended material	PVC, neoprene or rubber
Skin protection	For brief contact, few precautions other than clean body-covering clothing should be needed. When prolonged or frequently repeated contact could occur, use protective, full body clothing, such as PVC or rubber, impervious to this material. Respiratory protection: For many conditions, no respiratory protection may be needed; however, in dusty or unknown atmospheres or when exposures exceed limit values, use a NIOSH approved dust respirator.
Other precautions	Safety shower and eyewash stations. Consult a health and safety expert for the selection of personal protective equipment suitable for the working conditions.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	
Form	Granular solid
Colour	White in colour
Odour	No Special odour
Solubility	140g/L @ 24 °C (75 °F)
PH, 3% solution	10.9-11.0
Decomposition temperature	Temperature: Self-accelerating decomposition with oxygen release starting from 50

10. STABILITY AND REACTIVITY

If stored and handled in accordance with standard industrial practice no hazardous reactions are known.

Stability	Stable under certain conditions (see below)
Conditions to avoid	Heat/Sources of heat & Moisture
Materials to avoid	Water. Acids. Bases. Salts of heavy metals. Reducing agents Organic materials. Flammable substances.
Other information	Decomposition releases steam/heat

11. TOXICOLOGICAL INFORMATION

Acute toxicity	Oral route-LD50, rat (combined sexes), 1034 mg/kg. Dermal route-LDLo, rabbit, >2000mg/kg. Inhalation, LC0, 1 hour, rat, >4580mg/m3.
Irritation	Eyes, severe damage, rabbit. Skin, slightly irritating, rabbit.
Sensitization	No sensitization was noted when administered as a 75% w/v mixture during induction and as a 25% w/v mixture at challenge.
Comments	Toxic effect linked with irritant properties.

12. DISPOSAL CONSIDERATIONS

Dispose of in an approved waste facility operated by an authorized contractor in compliance with federal, state and local regulations.

Packing treatment	The empty and clean containers are to be recycled or disposed of in conformity with local regulations.
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13. ECOLOGICAL INFORMATION

Acute ecotoxicity	Fish, pimephales promelas, LC50, 70.7mg/L Fish, Pimephales promelas, NOEC, 96 hours, 1mg/L. Crustaceans, Daphnia pulex, EC50, 4.9mg/L.
Water	Considerable solubility and mobility.
Soil/sediments, percolation	Non-significant adsorption. Abiotic degradation
Air	Not applicable
Water	Significant hydrolysis.
Soil	Hydrolysis. Potential for bioaccumulation: Non-bioaccumuable.
Comments	Toxic for aquatic organisms. Nevertheless, hazard for the aquatic environment is limited due to produce properties. Not bio-accumuable Abiotic degradation. Low toxicity of degradation products.

14. TRANSPORT INFORMATION

D.O.T Proper Shipping Name	Oxidizing solid, N.O.S,
UN Number	1479
Hazard class	5.1

Label(s)	5.1 (Oxidizer)
Packing group	II

15. DISPOSAL CONSIDERATIONS

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16. REGULATORY INFORMATION

TSCA Inventory List	Yes
CERCLA Hazardous Substance (40CFR Part 302) Listed substance	No
Unlisted substance	Yes
Reportable Quantity(RQ)	100 pounds
Characteristic(s)	Ignitability
RCRA waste number	D001 SARA, Title III, Section 302/303 (40 CFR Part 355-Emergency Planning and Notification)
Extremely hazardous substance	No SARA, Title III, Section 311/312 (40 CFR Part 370-Hazardous Chemical Reporting: Community Right-To-Know)
Hazard category	Immediate health hazard Fire hazard
Threshold planning quantity	10,000 pounds

17. OTHER INFORMATION AND DATA

HMIS rating	Health-2 Flammability-0 Reactivity-1 PPE-Required HMIS is a registered trademark of the National Paint and Coating Association.
NFPA rating	Health-2 Flammability-0 Reactivity-1 Special hazards-OX NFPA is a registered trademark of the National Fire Protection Association.
Reason for issue	Biannual review.

The information and data contained in this "Material Safety Data Sheet" is based on our present state of scientific and technical knowledge. Gamyam Bio & Renewable Solutions Pvt. Ltd. does not guarantee the properties of the described products in terms of legal warranty regulations. In all cases, it is the responsibility of the user to determine the applicability of such information or the suitability of any products for their own particular purpose. The physical data presented herein does not purport to be the specifications. The structure and contents of information other than the data are based on ANSI Z400.1-2004 and GHS (globally harmonised system) and European union safety data sheet directive 91/155/EEC.