

**BIOCULUM-MSW™
MATERIAL SAFETY DATA SHEET
(According to 2001 / 58 / EC)**

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

- **Product details**
 - Product name : Bioculum-MSW™ (Proprietary Consortium of Beneficial Microorganisms)
 - Trade Name : Bioculum-MSW™
 - Synonyms : None
- **Use of Substance** : To accelerate aerobic composting of organic biomass of MSW
- **Manufacturer** : EXCEL INDUSTRIES LIMITED
184-87, S.V. Road,
Jogeshwari (West), Mumbai - 400102
INDIA
- **Informing Department** : Environ-Biotech Division
- **Emergency Information** : **Mumbai H.O.** (0830 - 1730 hrs)
Emergency Tel.: +91 22 66464200
Ahmedabad Plant (0830 - 1730 hrs)
Emergency Tel.: +91 9726422945

SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS

- | | |
|-----------------------------|----|
| • Ingredient name | % |
| ○ Mineral Calcium | 20 |
| ○ Mineral Phosphorous | 10 |
| ○ Mineral Humic | 40 |
| ○ Culture of Microorganisms | 10 |
| ○ Inert Mineral | 20 |

SECTION 3: HAZARDS IDENTIFICATION

- Potential hazards : Mild Irritant
- Potential health effects : Mild Irritant
- Relevant route of exposure:
 - Skin contact : May cause mild irritation. Dryness of skin on prolonged exposure
 - Eye contact : May cause mild irritation
 - Inhalation : Mild irritation of upper respiratory tract resulting in sneezing.
 - Ingestion : May cause gastro-intestinal disorder if ingested in large quantities
- Environmental effects : None
- Hazard symbols : None



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SECTION 4: FIRST AID MEASURES

- After eye contact : Flush eyes with plenty of water for 15 minutes. Remove contact lenses if easily possible. Seek medical attention if irritation persists.
- After skin contact : Immediate first aid is not likely to be required. However, on contact with the material remove the contaminated clothing. Wash contaminated skin with soap and large quantities of water. Seek medical attention if required..
- After inhalation : Remove exposed person to fresh air. If breathing is difficult, start artificial respiration. Seek medical attention immediately.
- After ingestion : Rinse mouth. Give large amount of water to drink. Never give anything by mouth to an unconscious person. Seek medical attention.
- Note to Physician : Treat symptomatically

SECTION 5: FIREFIGHTING MEASURES

- Flammability : Non-flammable
- Suitable extinguishing media : None
- Unsuitable fire extinguishing media : None
- Hazardous combustion : None
- Fire fighting procedure : None
- Special protective equipment for fire fighters : None

SECTION 6: ACCIDENTAL RELEASE MEASURE

- Personal precautions : Avoid breathing dust. Use personal protection recommended in Section 8.
- Environmental precautions : None
- Methods for cleaning up : Normal Cleaning



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SECTION 7: HANDLING AND STORAGE**HANDLING:**

- **Information for safe handling:** Only trained staff with special training and appropriate equipment must handle the product. Good industrial practice in housekeeping should be followed. Avoid contact with eyes, skin and clothing. Avoid making dust. Use personal protective equipment recommended in Section 8.
- **Technical measure like containment, ventilation, spillage handling etc.:** Ensure good ventilation at workplace.

STORAGE:

- **Conditions for safe storage:** store in cool, dry, well-ventilated area away from heat, water & rain. Keep containers securely sealed. Avoid physical damage to containers. Check regularly for spills/leaks. Store away from incompatible materials and foodstuff materials.
- **Material of construction of containers:** Paper/HDPE bags

SECTION 8: EXPOSURE CONTROL / PERSONAL PROTECTION

- **Occupational exposure limit values/Biological limit values:** No data available for the material
- **Applicable control measures, including engineering controls:** good industrial practice in housekeeping and personal hygiene should be followed. Ensure adequate ventilation of workplace.
- **Industrial Hygiene Controls:** Good personal hygiene practice should be followed. Avoid contact with eyes, skin and clothing. Wash hands before breaks and after work. Take bath after work. Do not eat, drink and smoke in the workplace. Do not breathe dust. Wear cotton masks or approved respirator. Use personal protective equipment.
- **Personal protective equipment for each exposure route (type & MOC):**
 - Respiratory protection: Wear cotton masks or respirator with appropriate filter
 - Hand protection: PVC/Rubber/Cotton gloves
 - Eye protection: Safety goggles
 - Skin protection: Apron
 - Foot: Safety shoes/Rubber gumboots



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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

General Information:

- Physical state : Solid free flowing powder
- Colour : Black
- Odour : Earthy smell

Important Health, Safety & Envir. Information:

- pH : 6.5 – 7.5 (20% solution)

Other information:

- Freezing/Melting point : Not applicable
- Bulk density : 0.7 – 0.9 gm/cm³
- Solubility in water : Insoluble in water. Forms suspension in water.
- Flash point (with method) : Not applicable
- Auto ignition temperature : Not applicable

SECTION 10: STABILITY AND REACTIVITY

- Chemical stability : Stable under normal conditions
- Conditions to avoid : Water may spoil the material
- Materials to avoid : None
- Hazardous decomposition products : Non-combustible material
- Hazardous polymerization : Does not occur

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicology data:

- Skin : No data available
- Ingestion : No data available
- Inhalation : No data available
- Irritancy : No data available

Acute effects:

- Skin contact : Non irritant
- Eye contact : Non irritant
- Inhalation : Mild irritation, sneezing
- Ingestion : May cause gastro-intestinal disorder

Chronic effects:

- Sensitization : No data available
- Carcinogenicity : No data available
- Reproductive toxicity : No data available
- Teratogenicity : No data available
- Mutagenicity : No data available
- Toxicologically synergistic products : No data available



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SECTION 12: ECOLOGICAL INFORMATION

- Ecotoxicity : No data available. Material has not been tested for Ecotoxicity.
- Mobility : No data available
- Persistence & degradability in soil/water : No data available
- Bioaccumulation potential : No data available
- Other adverse effects (ODP, GWP, etc.) : No data available

SECTION 13: DISPOSAL CONSIDERATION

- **Waste disposal information of product & contaminated packaging:** Spill and waste disposal procedures approved by state and local authorities must be observed. Labels should not be removed from containers until they have been cleaned and decontaminated. Decontaminate the container taking suitable precaution considering hazard before reuse or recycle and dispose off as per local rules.

SECTION 14: TRANSPORT INFORMATION

Land Transport ADR/RID (cross border):

ADR/RID-GGVS/E Class : Not regulated for transport

UN Number :

Proper Shipping Name :

Packaging Group :

Label :

Maritime Transport IMDG:

IMDG Class : Not regulated for transport

Page :

UN Number :

Proper Shipping Name :

Packaging Group :

EMS Number :

MFAG :

Marine Pollutant :

Label :

Air Transport ICAO/IATA:

ICAO/IATA Class : Not regulated for transport

UN Number :

Proper Shipping Name :

Packaging Group :

Label :



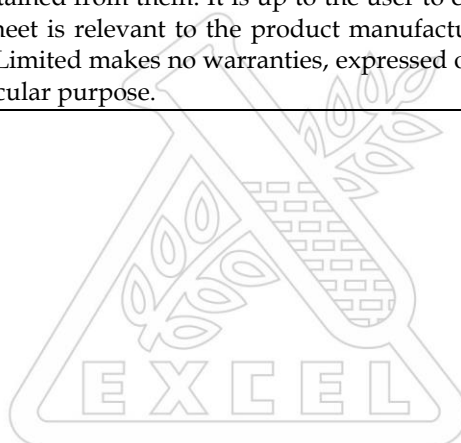
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SECTION 15: REGULATORY INFORMATION

- **National law/Regional laws:** Exported from India under Quarantine Certificate

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