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BIOHUB EMERGE

Safety Data Sheet



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Overview

BioHub Emerge has been assessed in accordance with model Work Health and Safety Regulations. This product is classified as: Hazardous according to the criteria of SWA. Not a Dangerous Good according to Australian Dangerous Goods (ADG) Code, IATA and IMDG/IMSBC criteria.

1. Identification of the Material and Manufacturer

Product Name BioHub Emerge

Intended Use Soil Conditioner

Details of Company BioHub Pty Ltd

3/49 Donaldson Road

Rocklea, Qld, 4106

Emergency Contact Australian Agricultural Chemicals

+(61)-7 3806 5733

UN Number N/A

D.G. Class N/A

Subsidiary Risk None

Hazchem Code N/A

Packaging Group N/A

Poisons Schedule N/A

2. Hazards Identification

Hazardous according to the criteria of Worksafe Australia

This product has been assessed in accordance with Model Work Health and Safety Regulations. Classified as hazardous.

- Skin Irritation Category 2
- Eye irritation Category 2B
- Specific Target Organ Toxicity (resp) Single Exposure Category 3

Precautionary Statements

Hazard Statement

H315: Causes skin irritation.

- H320: Causes eye irritation.
- H335: May cause respiratory irritation.

Prevention

- P261: Avoid breathing fumes, mists, vapours or spray.
- P262: Do not get in eyes, on skin, or on clothing.
- P264: Wash contacted areas thoroughly after handling.
- P271: Use only outdoors or in a well ventilated area.
- P281: Use personal protective equipment as required.

Response

- P312: Call a POISON CENTRE or doctor if you feel unwell.
- P362: Take off contaminated clothing and wash before reuse.
- P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P302+P352: IF ON SKIN: Wash with plenty of soap and water.
- P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if
- present and easy to do. Continue rinsing.
- P332+P313: If skin irritation occurs: Get medical advice.
- P337+P313: If eye irritation persists: Get medical advice.
- P370+P378: Not combustible. Use extinguishing media suited to burning materials.

Storage

- P404. Store In a closed container.
- P403+P233: Store in a well-ventilated place. Keep container tightly closed.

Disposal

P501. If they cannot be recycled, dispose of contents to an approved waste disposal plant and containers to landfill.

Other hazards which do not result in classification

Irritating to eyes and respiratory system, respiratory tract irritant.

3. Composition/Information on Ingredients

Substances presenting a health hazard within the meaning of the chemicals (Hazard Information and Packaging) Regulations 1993. This Is a commercial product whose exact ratio of components may vary slightly.

Substance Name None presenting a hazard

Chemical Description Dark brown liquid

Major Health Hazards Irritating to eyes and respiratory system, respiratory tract irritant.

Components CAS: 7732-18-5. Water. Concentration to 100%

CAS: 1415-93-6 Potassium humates. Concentration 30-60%%

4. First Aid Measures

General The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt,

seek medical attention for direct exposure to the chemical product or persistent discomfort,

showing the SDS of this product.

On Inhalation If irritation occurs, contact a Poisons Information Centre, or call a doctor. Remove source of

contamination or move victim to fresh air. If breathing is difficult, oxygen may be beneficial if administered by trained personnel, preferably on a doctor's advice. In severe cases, symptoms of

pulmonary oedema can be delayed up to 48 hours after exposure.

On Eye Contact Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 15 minutes

or until the product is removed, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face. Obtain medical attention

immediately. Take special care if exposed person is wearing contact lenses.

On Skin Contact Wash gently and thoroughly with water (use non-abrasive soap if necessary) for 5 minutes or

until chemical is removed.

On Ingestion If swallowed, do NOT induce vomiting. Wash mouth with water and contact a Poisons

Information Centre or call a doctor.

5. Fire Fighting Measures

Fire and Explosion HazardsThe major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or

both), fire gases. There is no risk of an explosion from this product under normal

circumstances if it is involved in a fire.

This product is likely to decompose only after heating to dryness, followed by further strong

heating. Fire decomposition products from this product may be toxic if inhaled. Take

appropriate protective measures.

Extinguishing Media Not combustible. Use extinguishing media suited to burning materials.

Fire Fighting If a significant quantity of this product is involved in a fire, call the fire brigade.

Flash Point Will not burn until water component is driven off.

Upper Flammability LimitDoes not burnLower Flammability LimitDoes not burnAutoignition temperatureDoes not burnFlammability ClassDoes not burn

6. Accidental Release Measures

Accidental Release

In the event of a major spill, prevent spillage from entering drains or water courses. Wear full protective clothing including eye/face protection. All skin areas should be covered. See below under Personal Protection regarding Australian Standards relating to personal protective equipment. Use PVC gloves. Eye/face protective equipment should comprise, as a minimum, protective glasses and, preferably, goggles. If there is a significant chance that vapours or mists are likely to build up in the cleanup area, we recommend that you use a respirator. Usually, no respirator is necessary when using this product.

Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage and dispose of promptly. Recycle containers wherever possible after careful cleaning. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. This material may be suitable for approved landfill. Ensure legality of disposal by consulting regulations prior to disposal. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

7. Handling and Storage

Handling

Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this SDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible

Storage

Store packages of this product in a cool place. Make sure that containers of this product are kept tightly closed. Keep containers dry and away from water. Keep away from combustible materials. Make sure that the product does not come into contact with substances listed under "Incompatibilities" in Section 10. Some liquid preparations settle or separate on standing and may require stirring before use. Check packaging - there may be further storage instructions on the label.

8. Exposure Controls and Personal Protection

The following Australian Standards will provide general advice regarding safety clothing and equipment: Respiratory equipment: AS/NZS 1715, Protective Gloves: AS 2161, Occupational Protective Clothing: AS/NZS 4501 set 2008, Industrial Eye Protection: AS1336 and AS/NZS 1337, Occupational Protective Footwear: AS/NZS2210. Exposure limits have not been established by SWA for any of the significant ingredients in this product. No special equipment is usually needed when occasionally handling small

quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

VentilationThis product should only be used where there is ventilation that is adequate to keep exposure

below the TWA levels. If necessary, use a fan.

Eye Protection Protective glasses or goggles should be worn when this product is being used. Failure to protect

your eyes may cause them harm. Emergency eye wash facilities are also recommended in an area

close to where this product is being used.

Skin Protection You should avoid contact even with mild skin irritants. Therefore, you should wear suitable

impervious elbow-length gloves and facial protection when handling this product. See below for

suitable material types.

Protective Material Types We

We suggest that protective clothing be made from the following materials: PVC.

Respirator Usually, no respirator is necessary when using this product. However, if you have any doubts

consult the Australian Standard mentioned above.

9. Physical and Chemical Properties

Physical state at 20°C Liquid

Appearance Dark brown liquid

Odour No data

Boiling Point Above 100°C at sea level

Vapour Pressure 2.37 kPa at 20C (water vapour pressure)

Volatiles Liquid component

Evaporation Rate at 25°C Non-applicable

Specific Gravity at 25°C 1.22
Relative Density at 25°C 1.22

Dynamic Viscosity at 25°C

Kinematic Viscosity at 25°C

Kinematic Viscosity at 40°C

Non-applicable

Concentration

Non-applicable

pH (neat) 4-6

Vapour Density at 25°C

Partition Co-Efficient n-octonol/water at 25°C

Non-applicable

Solubility in Water at 25°C

Non-applicable

Solubility Properties

Non-applicable

Decomposition Temperature

Melting Point/Freezing Point

Explosive Properties

Non-applicable

Non-applicable

Oxidising Properties Non-applicable

Flash Point Non Flammable (>93°C)

Flammability (solid/gas) Non-applicable **Auto-ignition Temperature** Non-applicable **Lower Flammability Limit** Non-applicable **Upper Flammability Limit** Non-applicable **Lower Explosive Limit** Non-applicable Non-applicable **Upper Explosive Limit** Surface Tension at 25°C Non-applicable Refraction Index Non-applicable

10. Stability and Reactivity

ReactivityNo hazardous reactions are expected because the product is stable under recommended storage

conditions.

Conditions to Avoid This product should be kept in a cool place, preferably below 30°C. Keep containers tightly

closed. Containers should be kept dry. Keep isolated from combustible materials.

Incompatibilities Strong bases, strong oxidising agents, metals.

Fire DecompositionThis product is likely to decompose only after heating to dryness, followed by further strong

heating. Combustion forms carbon dioxide, and if incomplete, carbon monoxide and possibly

smoke. Water is also formed. May form nitrogen and its compounds, and under some

circumstances, oxides of nitrogen. Occasionally hydrogen cyanide gas in reducing atmospheres. May form oxides of sulfur (sulfur dioxide is a respiratory hazard) and other sulfur compounds. Most will have a foul odour. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed

by coma and death.

Polymerisation Polymerisation reactions are unlikely; they are not expected to occur.

11. Toxicological Information

Target OrgansThere is no data to hand indicating any particular target organs.

Inhalation Short Term Exposure: This product is an inhalation irritant. Symptoms may include headache,

irritation of nose and throat and increased secretion of mucous in the nose and throat. Other

symptoms may also become evident, but they should disappear after exposure has ceased if

treatment is prompt.

Long Term Exposure: No data for health effects associated with long term inhalation.

Skin Contact Short Term Exposure: Available data indicates that this product is not harmful. It should present

no hazards in normal use. However, product is believed to be mildly irritating, but is unlikely to

cause anything more than mild transient discomfort.

Long Term Exposure: No data for health effects associated with long term skin exposure.

Eye Contact Short Term Exposure: This product is an eye irritant. Symptoms may include stinging and

reddening of eyes and watering which may become copious. Other symptoms may also become evident. If exposure is brief, symptoms should disappear once exposure has ceased. However,

lengthy exposure or delayed treatment may cause permanent damage.

Long Term Exposure: No data for health effects associated with long term eye exposure.

Ingestion Short Term Exposure: Significant oral exposure is considered to be unlikely. This product, while

believed to be not harmful, is likely to cause headache and gastric disturbance such as nausea and vomiting if ingested in significant quantities. However, this product may be irritating to mucous membranes but is unlikely to cause anything more than transient discomfort.

Long Term Exposure: No data for health effects associated with long term ingestion.

Carcinogen Status SWA: No significant ingredient is classified as carcinogenic by SWA.

NTP: No significant ingredient is classified as carcinogenic by NTP. IARC: No significant ingredient is classified as carcinogenic by IARC.

12. Ecological Information

This product is biodegradable. It will not accumulate in the soil or water or cause long term problems.

Ecotoxicity Not available

Persistence and degradability Not available

Bioaccumulative potential Not available

Mobility in soil Not available

Results of PBT and vPvB assessment Non-applicable

Other adverse effects Not described

13. Disposal Considerations

Waste management

This product may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be possible to reclaim the

(disposal and evaluation)

product by filtration, distillation or some other means. If neither of these options is suitable inhouse, consider controlled incineration, or contact a specialist waste disposal company.

Always dispose of in accordance with local, state, and federal regulations.

14. Transport Information

Transport of dangerous goods by land

UN Number Non-applicable

Proper shipping name or Technical name Non-applicable

Transport hazard class Non-applicable

Packing group Non-applicable

Environmental hazards for transport purposes No

Special precautions for user See section 9

Transport in bulk according to Annex II of Non-applicable

MARPOL 73/78 and the IBC code

Transport of dangerous goods by sea

UN Number Non-applicable

Proper shipping name or Technical name Non-applicable

Transport hazard class Non-applicable

Packing group Non-applicable

Environmental hazards for transport purposes No

Special precautions for user See section 9

Transport in bulk according to Annex II of Non-applicable

MARPOL 73/78 and the IBC code

Transport of dangerous goods by air

UN Number Non-applicable

Proper shipping name or Technical name Non-applicable

Transport hazard class Non-applicable

Packing group Non-applicable

Environmental hazards for transport purposes No

Special precautions for user See section 9

Transport in bulk according to Annex II of

Non-applicable

MARPOL 73/78 and the IBC code

15. Regulatory Information

It is recommended to use the information included in this safety data sheet as data used in a risk evaluation of the local circumstances in order to establish the necessary risk prevention measures for the manipulation, use, storage, and disposal of this product.

16. Other Information

SDS Creation Date 1/11/2024

Issue Number 001. This issue number replaces all previous issues.

Customer Service 1300 064 020

Australian Poisons Info Centre 13 11 26

The product should not be used for purposes other than shown in Section 1 without first referring to the supplier and obtaining written instructions. As specific conditions of use of the product are outside of the suppliers' control, the user is responsible for ensuring that the requirements of the relevant legislation are complied with. The information in this Safety Data Sheet is based on the present knowledge and current national legislation. It provides guidance on health, safety, and environmental aspects of the product and should not be construed as a guarantee of technical performance or suitability for particular applications. This SDS will be revised and updated as requirements occur. Should further information and relevant advice be required, contact BioHub Solutions Pty Ltd.