Dangjeong-ro 56,Gunpo-si,Gyeonggi-do, South Korea, 435-832

Tel: +82-31-397-6066, Fax +82-31-397-5322

Material Safety Data Sheet

1. Product and company name

Trade name: Chaga glycoprotein-o.5B
 Use: Cosmetic ingredient
 Company: Durae Corporation

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2. Hazard identification

- 1) GHS classification of the substance or mixture
- Physical/chemical hazards: The classification criteria are not met.
- Health hazards : Not Classified
- Environmental hazards: The data available do not support any environmental Hazard
- Human health hazards : The data available do not support any adverse human health hazard
- 2) GHS label elements, including precautionary statements
- Hazard symbol : NoneSignal word : None
- Prevention: Wear appropriate personal protective equipment

3. Composition / INCI information on ingredients

INCI Name/Chemical Name	CAS No.	EINECS No.	Content
Glycoproteins	66455-27-4	-	0.5%
Water	7732-18-5	231-791-2	49.5%
Butylene Glycol	107-88-0	203-529-7	50%

4. First aid measures

- 1) In case of skin contact:
- Wash with soap and water.
- Seek immediate medical attention, if it is needed.
- 2) In case of eye contact:

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- Rinse away thoroughly with plenty of water at least at 15 minute.
- Seek immediate medical attention.
- 3) In case of ingestion:
- If large amount swallowed or symptoms develop obtain medical attention.
- 4) In case of inhalation:
- remove the victim from the contaminated area to fresh air.
- Seek immediate medical attention, if it is needed.

5. Fire fighting measures

- 1) Suitable extinguishing media:
- Dry chemical powder, regular foam, carbon dioxide, water spray, and dry powder.
- 2) Specific hazards arising from chemical:
- Pyrolysis Products (1,3 Butylene glycol): Aliphatic compound, Carbon oxide
- 3) Special protective actions for fire-fighters:
- Move container from fire area if it can be done without risk.
- Use extinguishing media appropriate surrounding fire.
- Fight the fire from a safe distance or protected location.
- Full protective clothing and self-contained breathing apparatus must be worn.

6. Accidental release measure

- 1) Personal precautions, protective equipment, and emergency procedures :
- Wear appropriate personal protective equipment including self-contained breathing apparatus which conform to the relevant national or international standards.
- Work at the windward side.
- Shut off all sources of ignition; No fires, smoking, flames or heat in area.
- In case of spillage, evacuate personnel from immediate vicinity.
- If the substance has adhered to people, wash the affect area with plenty of water.
- 2) Methods and materials for containment and cleaning up
- Absorb spillages of solutions with a suitable inert material (e.g., sand or soil).
- Wash with plenty of water.
- Carefully transfer the spillage to waste containers.
- Do not try to clean up the leak without the proper protective equipment.
- Lager quantities and dispose of waste material should be collected and treated according to local regulations by incineration.
- 3) Environmental Protection Measures:
- Avoid liquid to enter sewer/public waters.
- Absorb the small overflows with inert solids.

7. Handling and storage

- 1) Precautions for safe handling:
- Avoid any ingestion and skin contact and wear impermeable gloves, safety goggles and full personal protective equipment.
- Handle in accordance with good industrial hygiene and safety practices.
- Shut off all sources of ignition: No fires, smoking, flames or heat in area.
- Keep away from strong acids, strong bases and oxidizing materials.
- 2) Conditions for safe storage, including any incompatibilities:
- Keep in the original unopened container, at cool temperature, protected from light and Moisture
- Any incompatibilities : None in particular.
- Shelf life: 24 months in the original unopened container

8. Exposure controls and personal protection

- 1) Respiratory protection:
- Use local exhaust ventilation and make available emergency shower and eye wash in the work area.
- Use explosion-proof electrical/ventilating/lighting.
- Use only non-sparking tools.
- 2) Individual protection measures, such as personal protective equipment
- Eye/face protection : Not needed.
- Skin protection : Not needed.

9. Physical and chemical properties

1) Appearance : Dark brown liquid
2) Odor : Characteristic
3) Vapour pressure : No information
4) Viscosity : No information
5) Solubility : water soluble
6) pH : 5.0 ~ 7.0
7) Specific gravity : 1.000 ~ 1.030

8) Boiling point :

- Water: 100°C

- 1,3 Butylene glycol : 203~209℃

9) Flammability(solid, gas): Non flammable.

10. Stability and reactivity

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1) Reactivity : Stable under conditions.

2) Chemical stability : Stable under usual conditions

- 3) Conditions to avoid: Avoid contact with strong alkalis and metals...
- 4) Materials to avoid: Avoid contact with strong alkalis and metals.
- 5) Hazardous decomposition products : Only at high temperatures may the product generate irritant vapours.

11. Toxicological information

Acute toxicity

1) Oral:

1,3 Butyene Glycol : No informationWater : No information

2) Dermal

- 1,3 Butylene Glycol:No information

- Water : no information

12. Ecological information

Toxicity

1) Acute fish toxicity: No data available

2) Acute crustacean toxicity: No data available

3) Acute algae toxicity: No data available

13. Disposal considerations

Disposal methods.

- 1) Waste from Residues:
- Dispose of by incineration or landfill in accordance with local regulations.
- Stack gases should be scrubbed.
- 2) Contaminated Packaging:
- Dispose of by incineration or landfill in accordance with local regulations.

14. Transport information

1) UN No.: None

2) UN proper shipping name : None3) TransportHazard class : None.

4) Packing group, if applicable: None

5) Environmental hazards

6) Marine pollutant : Not applicable7) ICAO/LATA : Not applicable

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8) Special precautions for user:

- Transport in properly sealed containers.
- Avoid spilling the substance by taking appropriate precautions.
- Keep away from sunlight or rain and avoid rough handling or dropping.
- Label all packaging and containers in accordance with regulations in force.

15. Regulatory information

EU Classification Not classified according to pertinent EC regulation.

16. Other information

The information describing our product with regard to possible security requirements is based on the present state of our knowledge and experience and upon sources which we believe to be creditable. It is supplied with no guarantee, expressed or implicit, of exactitude, and it does no imply any responsibility for loss, damage or expense, derived from handling, use or elimination of the product.

DURAE CORPORATION

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