

## Technical Data Sheet for Phytocare-HA CG 1M

### Product Description

Phytocare™ is a COSMOS-approved biological active extracted from Snow Mushrooms. It has played a prominent role in Chinese history as a celebrated ingredient in herbal, cosmetic, and culinary applications. It features powerful hydration, film forming and anti-oxidation properties, making it very suitable for anti-aging, antipollution, and urban defense formulations.

### Legislation

- INCI Tremella Fuciformis Sporocarp Extract
- CAS # 778577-37-0
- REACH# 05-2116472879-22-0000

### General Product Specification

| <u>Item</u>        |                 | <u>Specification</u>    | <u>Methods</u>                                       |
|--------------------|-----------------|-------------------------|--|
| Appearance         |                 | White or light yellow   | Visual   |
| Odor               |                 | Characteristic Smell    | Organoleptic   |
| Identify Test      | Total           | Orange yellow           | Phenol sulfuric acid method                          |
|                    | Glucuronic Acid | Amaranth (or peachblow) | Sulfuric Acid Carbazole Method                       |
| Particle size      |                 | > 80 mesh               | 2010 version of CHP 1 <sup>st</sup> Volume Appendix  |
| pH                 |                 | 5.5 -7.5                | 0.5% aqueous solution, Glass electrode               |
| % loss on drying   |                 | < 10%                   | 1g, 4 hrs, 105C                                      |
| % Ignition residue |                 | < 10%                   | 2010 Version of CHP 1 <sup>st</sup> volume, Appendix |
| % Transparency     |                 | ≥ 90%                   | 0.5% solution, centrifugal                           |
| Viscosity ( Pa.s)  |                 | 1.0 -1.8 Pa.S           | 0.5% aqueous solution at 25C                         |
| Molecular weight   |                 | > 1,000,000             | Ubbelohde Viscometer method                          |
| % Nitrogen         |                 | < 0.5%                  | Kjedahl Determination                                |
| Quantitativ        | Total           | ≥80%                    | Phenol Sulfuric acid                                 |

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|                               |            |          |  |
|-------------------------------|------------|----------|--|
| e method                      | Glucuronic | 10 – 30% | Sulfuric acid Carbazole method   |
| Heavy metal, ppm              |            | ≤ 20 ppm | 20120 Version CHP 1 <sup>st</sup> volume Appendix IXE (2 <sup>nd</sup> method)     |
| Arsenic, ppm                  |            | ≤ 2 ppm  | 2010 version of CHP 1 <sup>st</sup> Volume, Appendix IXF (Arsenic Stain Method)    |
| Total bacteria count ( cfu/g) |            | < 200    | Test Standard of for Import-Export Food of People's Republic of China. SN 0168     |
| Total yeast & Mold ( cfu/g)   |            | < 100    | GB4789.15-2010   |
| Escherichia Coli              |            | Negative | Test Standard of for Import-Export Food of the People's Republic of China. SN 0169 |

### **Safety data:**

- Repeated Insult Patch Test (RIPT) with 50 human subjects shows no skin irritation and no skin sensitization.
- Total heavy metal < 20 ppm, and Arsenic < 2 ppm
- Microbiology data: Total aerobic bacteria count and the total yeast/mold count < 100 cfu/g, free of Pathogens: E.Coli, P. Aeruginosa, and S. Aureus.

### **Features/Benefits**

- Highly effective hydration functionality
  - Pre-hydration and skin conductance studies shows 2.6 times improved water retention in stratum corneum over 4 week treatment period
- Strong anti-pollution barrier and film former
  - Branched chain polysaccharide verses standard linear chain hyaluronic acid, resulting in more flexible barrier with improved sensory and breakage strength
  - 4 week skin desorption study shows a significant decrease in water evaporation from stratum corneum, keep skin healthy and strong against environmental pollutants

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- Increases body's natural antioxidant defense
  - Boosts the production of super oxide dismutase, which the body produces to combat free radical exposure
- Meets ECOCERT, COSMOS natural and organic standards, Halal certified

## **Applications**

Cosmetic and Toiletry:

- Anti-pollution and urban defense formulations
- Skincare formulas with strong hydration claims
- Multifunctional color cosmetics with skin hydration benefits
- Specialized serums with high concentrations of active complexes

## **How to use it?**

- Soluble in water, add while mixing vigorously
- Fastest way to incorporate is to pre-mix into glycerin and then add slurry to water at 50 to 60 Celsius

## **Packaging**

0.5 kilogram plastic jars

## **Storage**

- Store the product in its original package and avoid storing at extreme high and low temperature.

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