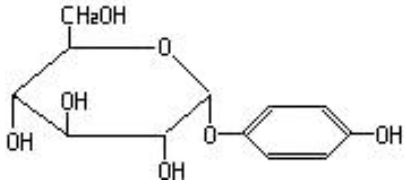
西安绿天生物技术有限公司
Plamed Green Science Group

Material Safety Data Sheet

- **1, Product and Company Identification**
- Product Name: Alpha- Arbutin
- CAS No.: 84380-01-8
- Synonyms and Trade Name: Arbutine, 4-Hydroxyphenyla-D-glucopyranoside, HydroquinoneO-a-D-glucopyranoside, a-Arbutin, a-D-Glucopyranoside, 4-hydroxyphenyl
- Molecular Weight: 272.26
- Chemical Formula: $C_{12}H_{16}O_7$
- Company Information: Manufacturer:
  - Plamed Green Science Limited
  - No.25 Tangyan Road, Xi'an, Shaanxi, China
  - Tel: 0086-29-81021258

- **2, Composition/Information on Ingredients**
- Chemical characterization:
- Designation: (CAS#) 4-Hydroxyphenyl-alpha-D-glucopyranoside (CAS# 84830-01-8): 100%

- EINECS NUMBER: 440-470-8



- **3, Hazards-identification**
- Hazard designation: Void
- Information pertaining to particular
- dangers for man and environment: Not applicable
- GHS label elements: Void

- **4, First-aid Measures**
- After inhalation: Supply fresh air. If required provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
  After skin contact: Instantly wash with water and soap and rinse thoroughly

- After eye contact: Seek immediate medical advice. Rinse opened eye for several minutes under running water. Then consult doctor.
- After swallowing: Seek medical treatment.

- **5, Fire-fighting measure**
- Suitable extinguishing agents: CO2, extinguishing powder or water jet. Fight large fires with water jet or alcohol-resistant foam.
- Special hazards caused by the materials, its products of combustion or flue gases: Can be released in case of fire. Carbon monoxide and carbon dioxide
- Protective equipment: Wear self-contained breathing apparatus Wear full protective suit.

- **6, Accidental release measure**
- Personnel-related safety precautions: Wear protective equipment. Keep unprotected person away. Ensure adequate ventilation
- Measures for environmental protection: Do not allow material to be released to the environment without proper government permits.
- Measures for cleaning/collecting: Collect mechanically
- Additional information: See section 7 for information on safe handing See section 8 for information on personal protection equipment See section 13 for information on disposal.

- **7, Handing and storage**
- Handing:
- Information for safe handing: Keep container tightly sealed Store in cool, dry place in tightly closed containers. No special precautions necessary if used correctly.
- Information about protection against explosions and fires: Keep ignition sources away-Do not smoke.
- Storage Requirements to be met by storerooms and containers: No special requirements
- Information about storage in
- Further information about storage conditions: Keep container tightly sealed. Store in cool, dry conditions in well sealed containers. one common storage facility: Store away from oxidizing agents.

- **8, Exposure controls personal protection**
- Additional information about design of technical systems: Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.
- Components with critical values that require Monitoring at the workplace: Not required

- Additional information: No data
- Personal protective equipment

General protective and hygienic measures: The usual precautionary measures should be adhered to in handling the chemicals
Keep away from foodstuffs, beverages and food.
Instantly remove and soiled and impregnated garments.
Wash hand during breaks and at the end of work.

- Breathing equipment: Use breathing protection with high concentrations.
- Protection of hands: Check protective gloves prior to each use for their proper condition.
- Material of gloves: The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
Imprervious gloves
- Penetration time of glove material: Not determined
- Eye protection: Safety glasses
- Body protection: Protective work clothing.

- **9, Physical and chemical properties**
- General information
- Form: Powder or Crystalline
- Colour: White
- Smell: Not determined
- Change in condition
- Melting point/Melting range: 202-206（±0.5）℃
- Boiling point/Boiling range: Not determined
- Sublimation temperature/start: Not determined
- Flash point: Not applicable
- Ignition temperature: Not determined
- Decomposition temperature: Not determined
- Danger of explosion: Product is not explosive
- Critical values for explosion
- Lower: Not determined
- Upper: Not determined
- Steam pressure: Not determined
- Density: Not determined

- Solubility in/Miscibility with water: Soluble

- **10, Stability and reactivity**
- Thermal decomposition/conditions to be avoided: No decomposition if used and stored according to specifications.
- Materials to be avoided: Oxidizing agents
- Dangerous reactions: No dangerous reactions known.
- Dangerous products of decomposition: Carbon monoxide and carbon dioxide

- **11, Toxicological information**
- Acute toxicity:
- Primary irritant effect:
- On the skin: May cause irritation
- On the eye: May cause irritation
- Sensitization: No sensitizing effect known.
- Other information(about experimental toxicology): Reproduce effects have been observed
- Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substances is not fully known. No classification data on carcinogenic propertied of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

- **12, Ecological information**
- Additional ecological information: Water hazard class1 (self-assessment): slightly hazardous for water.
- General notes: Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

Do not allow material to be released to the environment without proper governmental permits.

- **13, Disposal considerations**
- Product: Consult state, local or national regulations for Proper disposal
- Recommendation: Hand over to disposers of hazardous waste. Must be specially treated under adherence to official regulations.
- Uncleaned packages
- Recommendation: Disposal must be made according to official regulations.
- Recommendation cleaning agent: Water, if necessary with cleaning agent.

- **14, Transport information**
- Land trandport ADR/RID and GGVS/GGVE(cross-border/domestic)
- ADR/RID-GGVS/E Class: None
- Maritime transport IMDG/GGVSea:
- IMDG/GGVSea Class: No
- Air transport ICAO-TI and IATA-DGR:
- ICAO/IATA Class: None
- Transport/Additional information: Not dangerous according to the above specifications.

- **15, Regulation information**
- Designation according to EC guidelines: Observe the normal safety regulations when handing chemicals
  The product is not subject to identification regulations under EC Directives and the Ordinance on Hazardous Materials(GefStoffV).
- National regulations
- Information about limitation of use: For use only by technically qualified Individuals
- Water hazard class: (Self-assessment): Water hazard class 1
  slightly hazardous for water.

- **16, Other information**
- Declaration:

The information on this material provided as above is accurate with the good faith belief. However, this safety data sheet does not constitute a warranty of any kind, expressed or implied. It is the user's responsibility to implement policies for the safe handling and use of this product, and to determine the suitability of this information for their purpose. In the event of an adverse incident

associated with this material, this safety data sheet is not intended to be a substitute for consultation with medical or remediation personnel.