Updated April 30, 2010

Alpha Arbutin

Material Safety Data Sheet (MSDS)

1. Product Identification
Product Name: Alpha-Arbutin
INCI Name: Alpha-Arbutin
Chemistry: 4-Hydroxyphenyl-α-D-glucopyranoside
CAS Number: 84380-01-8
EINECS Number: 440-470-8

2. Physical & Chemical Properties

Melting Point:	201 °C
Boiling Point:	Test material and/or decomp products 285°C
Non-Volatiles:	no data available
Viscosity:	no data available
Specific Gravity:	not determined
Solubility in water:	151g/l at 20°C (pH of solution 5.8)
Refractive Index:	no data available
Appearance & Odor:	White powder with unknown odor.

3. Stability & Reactivity
Chemical Stability: Stable under normal conditions of storage and handling.
Conditions to Avoid: Not known
Incompatible Materials: Not known.
Hazardous Decomposition Products: Not known.
Hazardous Polymerization: Not known.

4. Handling & Storage
Handling precautions: Substance should be handled under conditions of good industrial hygiene and in conformity with any local regulations in order to avoid unnecessary exposure.
Storage Precautions: Store in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use.
Other Precautions: Engineering controls such as LEV are necessary to reduce exposure to the substance.

5. Accidental Release Measures
Personal Precautions: Evacuate personnel from immediate vicinity. Wear eye protection (e.g. goggles), chemical resistant gloves, protective clothing (e.g. an impervious apron) and a dust mask conforming to standard EN149 FFP1.
Environmental Precautions: Avoid release to drains.
Cleanup Procedure: Absorb spillage with a suitable inert material (e.g. sand or soil). Transfer the spillage to waste containers labeled in the same way as the original containers. Clean the spillage area with water and detergent.

6. Exposure Controls & Personal Protection
Respiratory Protection: Based upon current information and in the absence of occupational exposure limits the use of a dust mask to a minimum standard of EN149 FFP 1S is recommended.
Protective Clothing: Chemical protective gloves to a Standard EN 374 should be provided. Usage periods should not exceed the breakthrough times for the chemical stated by the manufacturer of the glove. Eye protection should be used when handling the substance. Protection should be capable of giving chemical protection as classified in EN166. Handling of the material should be done wearing chemical protective clothing suitable for protection against the chemical as classified by Standard EN368.
Other Protective Measures: Engineering controls such as LEV are recommended to reduce exposure to the substance.

7. Hazards Identification
Eye: None identified.
Skin: None identified.
Inhalation: None identified.
Ingestion: Harmful by acute oral exposure.
Signs and Symptoms: Not indicated.
Cancer: No data available.
Target Organs: No data available.
Developmental: No data available.
Pre-existing Medical Conditions: None known.

8. First Aid Measures
Eyes: Immediately flush eyes with plenty of water and seek medical attention if irritation develops.
Skin: Immediately wash affected area with soap and water. Seek medical attention if irritation develops
Inhalation: Remove victim to fresh air. Seek medical attention if symptoms occur.
Ingestion: Drink fluids to dilute. Seek medical attention.

9. Fire Fighting Measures
Flash Point: Not applicable.
Extinguishing Media: Water, carbon dioxide, foam, dry powder.
Fire Fighting Procedures: No special precaution and measures necessary. The substance will burn if involved in a fire, evolving noxious fumes e.g. carbon oxides.

10. Toxicological Information
The substance is harmful by acute oral exposure. Rat LD50 is between 300 and 500mg/kg. The substance is not irritation to rabbit skin or eyes. The substance is not a skin sensitizer (1/10 sensitized) in a Magnusson and Kligman maximization study in the guinea pig. An Ames test was negative. The test material, at a maximum concentration of 10% w/w produced no evidence of photo toxicity or photo allergenicity. The test material, in a fourteen day repeat application dermal irritation study in the guinea pig, produced a maximum Weekly Mean Irritation Index of 0.03 and was considered to be practically non-irritant to guinea pig skin under the conditions of the test.

11. Disposal Consideration
Dispose of by incineration or landfill in accordance with local regulations. Stack gases should be scrubbed.

12. Transport Information
DOT Shipping Name: not regulated
ADR/RIC Code: not regulated
Sea Transport IMDG Code: not regulated
Air Transport IATA: not regulated

13. Disclaimer
This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process. Such information is to be the best of the company's knowledge and believed accurate and reliable as of the date indicated. However, no representation, war-ranty or guarantee of any kind, express or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of use. It is the user's responsibility to satisfy himself as to the suitableness & completeness of such information for his own particular use.