SAFETY DATA SHEET

according to Regulation (EC) No.1907/2006 Version 2.0 Revision Date 12.30.2010 Print Date 4.10.2011

Material Safety Data Sheet

Alpha Arbutin msds

Section 1: Identification of the Substance/Preparation and of the Company/Undertaking				
Identification of the substance or p	repar	ation		
Product Name	:	Alpha arbutin		
INCI Name	:	Alpha-arbutin		
Brand	:	MC α-arbutin		
Product Number	:	C02001B		
CAS#	:	84380-01-8		
ELINCS #	:	440-470-8		
Origin	:	Biotechnological		
CAS Reg. Name	:	α -D-Glucopyranoside, 4-hydroxyphenyl		
Use of the substance/preparation	:	Skin whitening/lightening agent		
Company/undertaking identificatio	<u>n</u>			
M.C.Biotec Inc.				
No.40 Ma Jia Street, Nanjing 210009, Ch	ina			
Tel: 0086-25-86620042 Fax: 0086-866		2		
Email: <u>mc@mcbiotec.com</u> Website: <u>ww</u>				
Sec	ction	2: Hazards Identification		
Emergency Overview				
WHMIS Classification				
Not WHMIS cor	ntrolle	d. Not WHMIS controlled.		
Not a dangerous substance according to GHS.				
HMIS Classification				
	C			
Flammability:	C			
	C			
Potential Health Effects				



Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation.
Ingestion	May be harmful if swallowed.

Section 3: Composition and Information on Ingredients

Synonyms	:	α-Arbutin	
		4-Hydroxyphenyl-α-D-glucopyranoside	
		Hydroquinoneα-D-glucopyranoside	
Formula	:	$C_{12}H_{16}O_7$	
Molecular Weight	:	272.25 g/mol	

CAS-No.	EC-No.	Index-No.	Concentration			
4-Hydroxyphenyl-α-D-glucopyranoside						

```
84380-01-8
```

Section 4: First Aid Measures

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

440-470-8

In case of skin contact

Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

Conditions of flammability

Not flammable or combustible.

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Explosion data - sensitivity to mechanical impact

no data available



Explosion data - sensitivity to static discharge

no data available

Section 6: Accidental Release Measures

Personal precautions

Avoid dust formation. Avoid breathing vapors, mist or gas.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

Section 7: Handling and Storage

Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

Keep in a dry place.

Section 8: Exposure Controls/Personal Protection

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95(US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

General industrial hygiene practice.

Specific engineering controls

Use mechanical exhaust or laboratory fumehood to avoid exposure.

Section 9: Physical and Chemical Properties



Appearance	
Form	
Color	
Safety	
рН	5.0-7.0 (in 1 % water)
BP/BP Range	Test material and/or decomp products
	285°C
MP/MP Range	198.0-201.0
Freezing Point	N/A
Optical rotation	+174°-184°
Saturated Vapor Conc.	N/A
Bulk Density	N/A
Solubility	151g/l at 20°C(pH of solution 5.8)
N/A = not available	

Section 10: Stability and Reactivity

Stability

Chemical Stability: stable under recommended storage conditions

Materials to Avoid: Strong oxidizing agents.

Hazardous Decomposition Products

Hazardous decomposition products formed under fire conditions. – Carbon oxides.

Hazardous Polymerization

Will not occur

Section 11: 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.



Section 12: Ecological Information

Toxicity

no data available

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

PBT and vPvB assessment

no data available

Other adverse effects

no data available

Section 13: Disposal Considerations

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

Section 14: Transport Information

General

Not a hazardous material

DOT

Proper Shipping Name: None

Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA

Non-Hazardous for Air Transport: Non-hazardous for air transport.

ADR/RID

Not dangerous goods

IMDG

Not dangerous goods

Section 15: Regulatory Information

United States Regulatory Information



SARA LISTED: No

EU-Labelling Name

Not listed. (The product does not need to be labeled in accordance with EC Directive 67/548/EEC or

Directive 1999/45/EC or respective national laws)

ELINCS

440-470-8 [European List of Notified Chemical Substances].

Section 16: Other Information

Further information

The information above is based on our present knowledge. However, no representation, warranty 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. Users should make their own investigations to determine the suitability of the information for their particular purposes.

© M.C.BIOTEC Inc.

Updated: March 10, 2011