

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

ALPHA-ARBUTIN

Version 4.0

Revision Date 16.01.2015

Print Date 16.01.2015

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : ALPHA-ARBUTIN
REACH Registration Number : 01-0000018470-75-0000
Substance name : 4-hydroxyphenyl-a-D-glucopyranoside
CAS-No. : 84380-01-8

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance/Mixture : Ingredient for personal care products

1.3 Details of the supplier of the safety data sheet

Company : Chanjao Longevity Co., Ltd.
Bangkok
10230 Thailand
Telephone : +662-002-7-002
Telefax : +662-001-7-022
E-mail address : care@chanjao.com
Responsible/issuing person

1.4 Emergency telephone number

+662-002-7-002

2. Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 4 H302: Harmful if swallowed.

Classification (67/548/EEC, 1999/45/EC)

Harmful R22: Harmful if swallowed.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Warning

Hazard statements : H302 Harmful if swallowed.

Precautionary statements : **Prevention:**
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
Response:
P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.

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P330

Rinse mouth.

Disposal:

P501

Dispose of contents/ container to an approved waste disposal plant.

Hazardous components which must be listed on the label:

84380-01-8

alpha-D-glucopyranoside, 4-hydroxyphenyl

2.3 Other hazards

Risk of dust explosion.

3. Composition/information on ingredients

Brief description of the product : Substance

Molecular formula : C₁₂H₁₆O₇

ELINCS No. : 440-470-8

3.1 Substances

Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
alpha-D-glucopyranoside, 4-hydroxyphenyl	84380-01-8 440-470-8 01-0000018470-75	Xn; R22	Acute Tox. 4; H302	>= 97 - < 100

4. First aid measures

4.1 Description of first aid measures

General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.

If inhaled : Move to fresh air.
Consult a physician after significant exposure.

In case of skin contact : Take off contaminated clothing and shoes immediately.
Wash off with soap and plenty of water.
If symptoms persist, call a physician.

In case of eye contact : Flush eyes with water as a precaution.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

If swallowed : Clean mouth with water and drink afterwards plenty of water.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
Obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No specific symptoms known.

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4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Water
Foam

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.

5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Consider dust explosion hazard.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment.
Ensure adequate ventilation.
Avoid dust formation.
Avoid breathing dust.

6.2 Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust.

6.4 Reference to other sections

For personal protection see section 8.
For disposal considerations see section 13.

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid formation of respirable particles.
Avoid exceeding the given occupational exposure limits (see section 8).

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For personal protection see section 8.
Dispose of rinse water in accordance with local and national regulations.
Smoking, eating and drinking should be prohibited in the application area.

Advice on protection against fire and explosion : Avoid dust formation.
Provide appropriate exhaust ventilation at places where dust is formed.
Take precautionary measures against static discharges.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Protect against light.
: Keep container tightly closed and dry.

Storage temperature : 15 - 25 °C

7.3 Specific end use(s)

Specific use(s) : Not applicable

8. Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Personal protective equipment

Respiratory protection : In the case of dust or aerosol formation use respirator with an approved filter.

Hand protection : Glove material: for example nitrile rubber

Eye protection : Safety glasses with side-shields

Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.
Wash hands before breaks and at the end of workday.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : powder

Colour : white - off-white

Odour : none

Odour Threshold : No information available.

pH : No data available

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Melting point/range	: 201 °C (Tested according to Directive 92/69/EEC.)
Boiling point/boiling range	: ca. 284,4 °C (at 1 021,7 hPa; Tested according to Directive 92/69/EEC.)
Flash point	: Not applicable
Flammability (solid, gas)	: not highly flammable (Method: Flammability (solids)) May form combustible dust concentrations in air
Vapour pressure	: not determined
Relative vapour density	: Not applicable
Density	: not determined
Water solubility	: 151 g/l (ca. 20 °C; Tested according to Directive 92/69/EEC.)
Partition coefficient: n-octanol/water	: log Pow -1,69 (ca. 21 °C; Tested according to Directive 92/69/EEC.)
Auto-ignition temperature	: No data available
Thermal decomposition	: Decomposes on heating. Potential for exothermic hazard
Explosive properties	: Not explosive
Oxidizing properties	: No data available

9.2 Other information

Combustibility index for deposited dust	: 5 (23 °C)
Dust explosion class	: St(H)2 (Milled sample, Median value of the tested sample 0,040 mm, Loss on drying 0,6 %; The value was determined in the modified Hartmann tube.)
Minimum ignition energy	: 3 - 10 mJ (Milled sample, Median value of the tested sample 0,040 mm, Loss on drying 0,6 %, EN 13821) The Minimum ignition energy (MIE) of a dust/air mix depends on the particle size the water content and the temperature of the dust. The finer and the dryer the dust the lower the MIE.
	: General remark: The indicated dust explosion characteristics are only valid for this product and are sensitive to the sample's parameters.
Powder volume resistivity	: 4E+11 Ohmm (Product sample, Median value of the tested sample 0,077 mm, Loss on drying 0,6 %)
Minimum ignition temperature of a dust/air mix	: 440 °C (Median value of the tested sample 0,077 mm) determined in the BAM oven
Molecular weight	: 272,25 g/mol

10. Stability and reactivity

10.1 Reactivity

No hazards to be specially mentioned.

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10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Dust may form explosive mixture in air.

10.4 Conditions to avoid

Heat.

10.5 Incompatible materials

Strong acids and strong bases
Strong oxidizing agents

10.6 Hazardous decomposition products

No decomposition if used as directed.

11. Toxicological information

11.1 Information on toxicological effects

- | | |
|-----------------------------------|---|
| Acute oral toxicity | : LD50 (Rat): > 300 - < 500 mg/kg
(OECD Test Guideline 423) |
| Skin corrosion/irritation | : No skin irritation (Rabbit, OECD Test Guideline 404)
Prolonged skin contact may cause skin irritation.
: no phototoxic skin reaction (Guinea pig) |
| Serious eye damage/eye irritation | : slight irritation (Rabbit, OECD Test Guideline 405) |
| Respiratory or skin sensitisation | : The results of a test on guinea pigs showed this substance to be a weak skin sensitiser. (Guinea pig, OECD Test Guideline 406)

: no photoallergenic skin reaction (Guinea pig) |
| Genotoxicity in vitro | : not mutagenic (Ames test, OECD Test Guideline 471) |
| Genotoxicity in vivo | : not genotoxic (Mouse, Mutagenicity (micronucleus test)) |
| Carcinogenicity | : No indication for carcinogenicity known. |
| Reproductive toxicity | : No indication for adverse effects on fertility known. |
| STOT - single exposure | : The substance or mixture is not classified as specific target organ toxicant, single exposure. |
| STOT - repeated exposure | : This information is not available. |

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Aspiration toxicity : No aspiration toxicity classification

Further information : The product passes into and partly through the skin of pigs.

12. Ecological information

12.1 Toxicity

No data is available on the product itself.

12.2 Persistence and degradability

Biodegradability : Readily biodegradable.
81,15 % (28 d)
(OECD Test Guideline 301F)

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water : log Pow -1,69 (ca. 21 °C ; Tested according to Directive 92/69/EEC.)

12.4 Mobility in soil

Distribution among environmental compartments : No data available

12.5 Results of PBT and vPvB assessment

Assessment : The substance does not fulfill the PBT criteria.
: The substance does not fulfill the vPvB criteria.

12.6 Other adverse effects

Additional ecological information : There is no data available for this product.

13. Disposal considerations

13.1 Waste treatment methods

Product : Do not contaminate ponds, waterways or ditches with chemical or used container.
Do not dispose of waste into sewer.
Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging : Dispose of as unused product.
Do not re-use empty containers.

14. Transport information

14.1 UN number

ADR

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Not dangerous goods

RID

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.2 Proper shipping name

ADR

Not dangerous goods

RID

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.3 Transport hazard class

ADR

Not dangerous goods

RID

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.4 Packing group

ADR

Not dangerous goods

RID

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.5 Environmental hazards

ADR

Not dangerous goods

RID

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.6 Special precautions for user

Not classified as dangerous in the meaning of transport regulations.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available

15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

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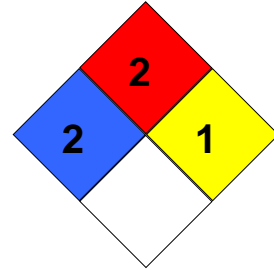
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NFPA Classification : Health hazard: 2
Fire Hazard: 2
Reactivity Hazard: 1



15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance.

16. Other information

Full text of R-phrases referred to under sections 2 and 3

R22 Harmful if swallowed.

Full text of H-Statements referred to under sections 2 and 3.

H302 Harmful if swallowed.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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 process, unless specified in the text.

Abbreviations: 67/548/EEC= Dangerous Substances Directive. 1999/45/EC= Dangerous Preparations Directive. Regulation (EC) No. 1272/2008= Regulation on classification, labelling and packaging of substances and mixtures. DNEL= Derived No-Effect Level. PNEC= Predicted No-Effect Concentration. NFPA= National Fire Protection Association (USA). IATA= International Air Transport Association. IMDG= International Maritime Dangerous Goods. RID= International Rule for Transport of Dangerous Substances by Railway; ADR= European Agreement concerning the International Carriage of Dangerous Goods by Road. TWA= Time Weighted Average. STEL= Short term exposure limit. WEL = Workplace Exposure Limit.