

Importers and dealers of

- Natural and Organic Oils
- Essential Oils
- Natural Powders
- Clays, etc
- Agro Products
- General Contracts

Certificate of Analysis

Product Name: Alpha-Arbutin

INCI Name: Alpha-Arbutin CAS Number: 84380-01-8

Lot Number: Not available (data may vary slightly with different lots or batches)

Expiration Date: 24 months from production date

Property	Specification	Analysis
Appearance (Visual)	White Crystalline Fine Powder	Conforms
Clarity of Water Solution (Organoleptic)	Transparency, colorless, none suspended matters	Conforms
Assay (In-house)	99.5% MIN	99.99%
IR (In-house)	Conforms to reference standard	Conforms
Melting Point (In-house)	203 ~ 206 ± 1°C	204.1 ~ 206.6°C
pH (In-house)	5.0 - 7.0	6.1
Specific optical rotation (In-house)	[α]D ²⁰ =+175 ~ +185°	+178.7°
Loss on Drying (In-house)	0.5% MAX	0.04%
Ignition Residue (In-house)	0.5% MAX	0.06%
Hydroquinone (In-house)	Negative	Negative
Heavy Metals (In-house)	10 ppm MAX	<10 ppm
Lead (Pb) (In-house)	10 ppm MAX	<10 ppm
Arsenic (As) (In-house)	2 ppm MAX	<2 ppm

<u>Disclaimer</u>: 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, 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. It is the user's responsibility to satisfy themself as to the suitableness & completeness of such information for their own particular use.

Mercury (Hg) (In-house)	1 ppm MAX	<1 ppm
Total Plate Count	100 CFU/g MAX	<100 CFU/g
(In-house)		
Molds & Yeasts	50 CFU/g MAX	No detected
(In-house)		
E. Coli	Negative	Negative
(In-house)		
Staphylococcus aureus	Negative	Negative
(In-house)		
Salmonella	Negative	Negative
(In-house)		
Pseudomonas aeruginosa	Negative	Negative
(In-house)		

[&]quot;Certified in compliance with the terms of the US-Canada Organic Equivalency Arrangement. The above data was obtained using the test indicated and is subject to the deviation inherent in the test method. Results may vary under other test methods or conditions.

This report is not to be signed.

All data are as per our supplier.

<u>Disclaimer</u>: 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, 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. It is the user's responsibility to satisfy themself as to the suitableness & completeness of such information for their own particular use.