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STABILITY DATA

Ashwagandha Extract 5% Withanolides

This document presents the stability profile of Ashwagandha Extract 5% Withanolides supplied by Chengdu PNP Biotech Co., Ltd. Samples were packed in the normal commercial package and stored under the conditions stated for each study, and the product was tested at every time point shown below. The programme covers a long-term study and an accelerated study, conducted in accordance with the ICH Q1A methodology (and the corresponding pharmacopeial stability guideline for drug substances), each performed on three separate, non-consecutive production batches, with the analytical results from testing actually carried out at each time point.

Product Name	Ashwagandha Extract 5% Withanolides	**Country of Origin**	India
Botanical Source	*Withania somnifera* (L.) Dunal	**Part Used**	Whole plant

Long-Term Stability

Condition: 25 ± 2 °C / 60 ± 5 % RH. Time points are expressed in months. Each batch is identified in the merged row above its results; all batches were stored through the final time point, and every listed result is from testing performed at that time point.

The shelf life stated for this product is confirmed by these real-time long-term stability studies.

Test Item	Specification	0 m	3 m	6 m	9 m	12 m	18 m	24 m
Batch LT-1 | Manufacture 2023-11-08 | Study start 2023-11-15								
Appearance / colour	Light brown to brown powder	Conforms	Conforms	Conforms	Conforms	Conforms	Conforms	Conforms
Withanolides	≥ 5.0%	5.41%	5.39%	5.29%	5.25%	5.25%	5.13%	5.09%
Loss on Drying	≤ 5.0%	2.37%	2.55%	2.58%	2.70%	2.84%	3.12%	3.53%
Standard Plate Count	≤ 10,000 cfu/g	979 cfu/g	968 cfu/g	517 cfu/g	1,399 cfu/g	1,065 cfu/g	1,009 cfu/g	1,947 cfu/g
Total Yeast & Mold	≤ 1,000 cfu/g	79 cfu/g	36 cfu/g	62 cfu/g	120 cfu/g	159 cfu/g	87 cfu/g	235 cfu/g
Batch LT-2 | Manufacture 2024-04-03 | Study start 2024-04-10								
Appearance / colour	Light brown to brown powder	Conforms	Conforms	Conforms	Conforms	Conforms	Conforms	Conforms
Withanolides	≥ 5.0%	5.33%	5.26%	5.29%	5.25%	5.23%	5.10%	5.09%
Loss on Drying	≤ 5.0%	2.43%	2.55%	2.71%	2.70%	2.94%	3.20%	3.49%
Standard Plate Count	≤ 10,000 cfu/g	492 cfu/g	972 cfu/g	501 cfu/g	967 cfu/g	1,198 cfu/g	1,024 cfu/g	2,679 cfu/g
Total Yeast & Mold	≤ 1,000 cfu/g	53 cfu/g	39 cfu/g	58 cfu/g	111 cfu/g	101 cfu/g	104 cfu/g	82 cfu/g
Batch LT-3 | Manufacture 2024-09-11 | Study start 2024-09-18								
Appearance / colour	Light brown to brown powder	Conforms	Conforms	Conforms	Conforms	Conforms	Conforms	Conforms
Withanolides	≥ 5.0%	5.21%	5.19%	5.15%	5.15%	5.14%	5.06%	5.05%
Loss on Drying	≤ 5.0%	2.31%	2.40%	2.56%	2.58%	2.86%	3.10%	3.36%
Standard Plate Count	≤ 10,000 cfu/g	883 cfu/g	489 cfu/g	975 cfu/g	1,364 cfu/g	1,157 cfu/g	887 cfu/g	1,617 cfu/g
Total Yeast & Mold	≤ 1,000 cfu/g	86 cfu/g	65 cfu/g	126 cfu/g	124 cfu/g	113 cfu/g	99 cfu/g	186 cfu/g

Accelerated Stability

Condition: 40 ± 2 °C / 75 ± 5 % RH. Time points are expressed in months.

Accelerated data are supportive only; the shelf life is ultimately confirmed by the real-time long-term studies above.

Test Item	Specification	0 m	1 m	2 m	3 m	6 m
Batch ACC-1 | Manufacture 2023-10-24 | Study start 2023-10-31						
Appearance / colour	Light brown to brown powder	Conforms	Conforms	Conforms	Conforms	Conforms
Withanolides	≥ 5.0%	5.19%	5.21%	5.16%	5.15%	5.06%
Loss on Drying	≤ 5.0%	2.44%	2.58%	2.81%	2.97%	3.40%
Standard Plate Count	≤ 10,000 cfu/g	338 cfu/g	512 cfu/g	1,664 cfu/g	1,977 cfu/g	2,836 cfu/g
Total Yeast & Mold	≤ 1,000 cfu/g	88 cfu/g	46 cfu/g	73 cfu/g	62 cfu/g	97 cfu/g

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Test Item	Specification	0 m	1 m	2 m	3 m	6 m
Batch ACC-1 | Manufacture 2023-10-24 | Study start 2023-10-31						
Batch ACC-2 | Manufacture 2023-12-06 | Study start 2023-12-13						
Appearance / colour	Light brown to brown powder	Conforms	Conforms	Conforms	Conforms	Conforms
Withanolides	≥ 5.0%	5.30%	5.20%	5.18%	5.16%	5.07%
Loss on Drying	≤ 5.0%	2.45%	2.51%	2.84%	2.86%	3.43%
Standard Plate Count	≤ 10,000 cfu/g	543 cfu/g	680 cfu/g	602 cfu/g	981 cfu/g	1,984 cfu/g
Total Yeast & Mold	≤ 1,000 cfu/g	49 cfu/g	84 cfu/g	95 cfu/g	113 cfu/g	190 cfu/g
Batch ACC-3 | Manufacture 2024-01-17 | Study start 2024-01-24						
Appearance / colour	Light brown to brown powder	Conforms	Conforms	Conforms	Conforms	Conforms
Withanolides	≥ 5.0%	5.27%	5.29%	5.24%	5.15%	5.08%
Loss on Drying	≤ 5.0%	2.20%	2.44%	2.62%	2.80%	3.38%
Standard Plate Count	≤ 10,000 cfu/g	477 cfu/g	1,328 cfu/g	1,048 cfu/g	1,942 cfu/g	2,197 cfu/g
Total Yeast & Mold	≤ 1,000 cfu/g	37 cfu/g	109 cfu/g	97 cfu/g	78 cfu/g	111 cfu/g

Legend: “Conforms” means the attribute is consistent with the initial (0-month) value and meets the specification.

Prepared by: Mia Yu Approved by: Charlie Wang Date: Nov. 18, 2026