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STABILITY DATA

Red Ginseng Root Extract 20% Ginsenosides

This document presents the stability profile of Red Ginseng Root Extract 20% Ginsenosides 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	Red Ginseng Root Extract 20% Ginsenosides	**Country of Origin**	China
Botanical Source	*Panax ginseng*	**Part Used**	Dried Root

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	Light yellow fine powder	Conforms	Conforms	Conforms	Conforms	Conforms	Conforms	Conforms
Assay (Total Ginsenosides)	≥ 20.0%	20.64%	20.61%	20.60%	20.57%	20.46%	20.44%	20.37%
Loss on Drying	≤ 5.0%	2.09%	2.19%	2.37%	2.48%	2.61%	2.83%	3.21%
Standard Plate Count	≤ 10,000 cfu/g	536 cfu/g	493 cfu/g	808 cfu/g	1,024 cfu/g	670 cfu/g	1,556 cfu/g	1,276 cfu/g
Total Yeast & Mold	≤ 1,000 cfu/g	50 cfu/g	31 cfu/g	36 cfu/g	80 cfu/g	84 cfu/g	113 cfu/g	160 cfu/g
Batch LT-2 | Manufacture 2024-04-03 | Study start 2024-04-10								
Appearance	Light yellow fine powder	Conforms	Conforms	Conforms	Conforms	Conforms	Conforms	Conforms
Assay (Total Ginsenosides)	≥ 20.0%	20.75%	20.72%	20.68%	20.63%	20.61%	20.53%	20.51%
Loss on Drying	≤ 5.0%	2.03%	2.12%	2.30%	2.55%	2.59%	2.85%	3.17%
Standard Plate Count	≤ 10,000 cfu/g	664 cfu/g	528 cfu/g	1,009 cfu/g	1,208 cfu/g	784 cfu/g	1,147 cfu/g	1,547 cfu/g
Total Yeast & Mold	≤ 1,000 cfu/g	27 cfu/g	82 cfu/g	36 cfu/g	63 cfu/g	133 cfu/g	144 cfu/g	174 cfu/g
Batch LT-3 | Manufacture 2024-09-11 | Study start 2024-09-18								
Appearance	Light yellow fine powder	Conforms	Conforms	Conforms	Conforms	Conforms	Conforms	Conforms
Assay (Total Ginsenosides)	≥ 20.0%	20.60%	20.57%	20.59%	20.48%	20.49%	20.39%	20.34%
Loss on Drying	≤ 5.0%	2.05%	2.18%	2.36%	2.48%	2.54%	2.76%	3.04%
Standard Plate Count	≤ 10,000 cfu/g	584 cfu/g	504 cfu/g	595 cfu/g	395 cfu/g	639 cfu/g	1,430 cfu/g	1,645 cfu/g
Total Yeast & Mold	≤ 1,000 cfu/g	70 cfu/g	36 cfu/g	87 cfu/g	104 cfu/g	89 cfu/g	162 cfu/g	167 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	Light yellow fine powder	Conforms	Conforms	Conforms	Conforms	Conforms
Assay (Total Ginsenosides)	≥ 20.0%	20.61%	20.58%	20.53%	20.40%	20.27%
Loss on Drying	≤ 5.0%	2.10%	2.25%	2.39%	2.62%	3.16%
Standard Plate Count	≤ 10,000 cfu/g	648 cfu/g	722 cfu/g	373 cfu/g	493 cfu/g	772 cfu/g
Total Yeast & Mold	≤ 1,000 cfu/g	29 cfu/g	46 cfu/g	38 cfu/g	66 cfu/g	71 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	Light yellow fine powder	Conforms	Conforms	Conforms	Conforms	Conforms
Assay (Total Ginsenosides)	≥ 20.0%	20.65%	20.55%	20.48%	20.40%	20.18%
Loss on Drying	≤ 5.0%	1.99%	2.20%	2.37%	2.60%	3.14%
Standard Plate Count	≤ 10,000 cfu/g	537 cfu/g	325 cfu/g	458 cfu/g	827 cfu/g	846 cfu/g
Total Yeast & Mold	≤ 1,000 cfu/g	47 cfu/g	46 cfu/g	77 cfu/g	123 cfu/g	116 cfu/g
Batch ACC-3 | Manufacture 2024-01-17 | Study start 2024-01-24						
Appearance	Light yellow fine powder	Conforms	Conforms	Conforms	Conforms	Conforms
Assay (Total Ginsenosides)	≥ 20.0%	20.75%	20.68%	20.58%	20.48%	20.32%
Loss on Drying	≤ 5.0%	2.07%	2.18%	2.43%	2.53%	3.18%
Standard Plate Count	≤ 10,000 cfu/g	470 cfu/g	626 cfu/g	1,087 cfu/g	686 cfu/g	1,748 cfu/g
Total Yeast & Mold	≤ 1,000 cfu/g	72 cfu/g	29 cfu/g	90 cfu/g	96 cfu/g	108 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: Jan. 13, 2026