

# Certificate

## POWDERED ASHWAGANDHA ROOT EXTRACT

(*Withania somnifera* Extract)

USP Catalog No.:	1043309
USP Lot No.:	F1I273

<p>Powdered Ashwagandha Root Extract is a complex mixture containing withanolides, calculated on the dried basis as the sum of withanolide aglycones, calculated as withanolide A, and withanolide glycosides, calculated as withanoside IV.</p> <p>The identified components of the extract are:</p> <table data-bbox="324 819 844 1144"> <tr> <td>Withanoside IV</td> <td>CAS No.: 362472-81-9</td> </tr> <tr> <td>Physagulin D</td> <td>CAS No.: 146713-92-0</td> </tr> <tr> <td>27-Hydroxywithanone</td> <td>CAS No.: 871949-32-5</td> </tr> <tr> <td>Withanoside V</td> <td>CAS No.: 256520-90-8</td> </tr> <tr> <td>Withanoside VI</td> <td>CAS No.: 362472-82-0</td> </tr> <tr> <td>Withaferin A</td> <td>CAS No.: 5119-48-2</td> </tr> <tr> <td>Withastramonolide</td> <td>CAS No.: 66873-31-2</td> </tr> <tr> <td>Withanolide A</td> <td>CAS No.: 32911-62-9</td> </tr> <tr> <td>Withanone</td> <td>CAS No.: 27570-38-3</td> </tr> <tr> <td>Withanolide B</td> <td>CAS No.: 56973-41-2</td> </tr> </table>	Withanoside IV	CAS No.: 362472-81-9	Physagulin D	CAS No.: 146713-92-0	27-Hydroxywithanone	CAS No.: 871949-32-5	Withanoside V	CAS No.: 256520-90-8	Withanoside VI	CAS No.: 362472-82-0	Withaferin A	CAS No.: 5119-48-2	Withastramonolide	CAS No.: 66873-31-2	Withanolide A	CAS No.: 32911-62-9	Withanone	CAS No.: 27570-38-3	Withanolide B	CAS No.: 56973-41-2	<p>CAS No.: 90147-43-6</p>
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Withanone	CAS No.: 27570-38-3																				
Withanolide B	CAS No.: 56973-41-2																				
	<p>Molecular Formula: NA</p>																				
	<p>Molecular Weight: NA</p>																				

**LABEL TEXT**



Lot.: F11273

**USP REFERENCE STANDARD**

**POWDERED ASHWAGANDHA ROOT EXTRACT 1 g**



Warning! Harmful if swallowed.

Do not dry. Keep container tightly closed.  
Protect from light and moisture. Store in a  
refrigerator. This material is hygroscopic.

USP, 12801 Twinbrook Pkwy, Rockville, MD, +1-301-881-0868  
Cat. No. 1043309 Material mfd. in India

For use with specified USP compendial  
tests. Not for use as a drug. See SDS prior  
to use at [www.usp.org/sds](http://www.usp.org/sds).

Wash thoroughly after handling. If  
swallowed: Call a poison center/doctor if  
you feel unwell. Rinse mouth. Dispose of  
contents/container in accordance with  
local/regional/national/international  
regulations.

*Jeri L. Joth*

*Quality Assurance*

**Calculation Value**

If a value is not provided on the label or accompanying documentation and the Reference Standard has a quantitative USP compendial application, a value of 100.0% is used. The purity value is not applicable for qualitative uses. Please refer to the specific Reference Standard label for further information.

**Expiration**

Current lots are identified in the current USP Catalog. In some cases, the previous lot may still be considered valid for use. If so, it is identified in the column marked "Previous Lot/Valid Use Date."

It is the responsibility of each user to determine that this lot is current or valid when used. For the most up-to-date information, please refer to the USP Store at [www.usp.org](http://www.usp.org).

**Instructions for Use**

Follow the instructions on the label of the USP Reference Standard and in the appropriate USP documentary standard(s).

**Non-Monograph Use**

The suitability of this Reference Standard for use in non-compendial applications is solely the responsibility of the user.

**LEGAL NOTICE**

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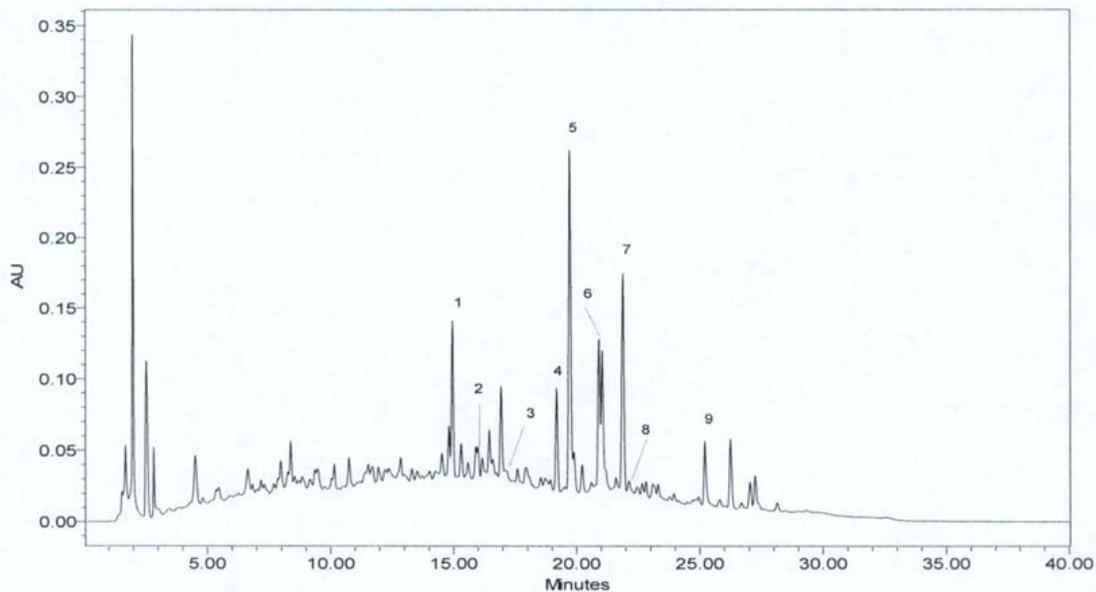
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# Typical Chromatogram

## USP Powdered Ashwagandha Root Extract RS

<b>Catalog Number:</b> 1043309
<b>Lot:</b> F1I273
<b>Monographs:</b> Ashwagandha Root Powdered Ashwagandha Root Powdered Ashwagandha Root Extract
<b>Publication:</b> USP/NF
<b>Tests:</b> Identification - Thin-Layer Chromatography Identification - HPLC Retention Time Comparison Composition - Content of Withanolides
<b>Sample:</b> As described in monograph



- 1 – withanoside IV
- 2 - physagulin D
- 3 – 27-hydroxywithanone
- 4 – withanoside V & withanoside VI
- 5 – withaferin A
- 6 – withastramonolide
- 7 – withanolide A
- 8 – withanone
- 9 – withanolide B

This chromatogram is supplied for information only, unless otherwise specified in an applicable monograph or general chapter.