



**KEB**<sup>®</sup>  
Biotechnology  
旭辉生物

**Inner Mongolia Ever Brilliance Biotechnology Co., Ltd.**

Add: New Eastern Industrial District, Kailu, Tongliao, Inner Mongolia 028400, China

Fax: +86-10-8710 3722 Tel: +86-10-8710 3711

E-mail: info@kebiotech.com

Web: www.kebiotech.com

## Specification Sheet

### Raffinose Pentahydrate 99%

Item No.:	RP001	
Country of Origin:	P. R. China	
Botanic Name:	<i>Gossypium hirsutum</i> L.	
Plant Parts:	Seeds	
Shelf Life:	Two Years	
Sterilization:	Non-Irradiated/Non-ETO/Treat by Heat Only	
<b>Test</b>	<b>Specification</b>	<b>Method</b>
<b>Identification</b>		
Assay	≥ 99.0%	HPLC-ELSD
<b>Physical/Chemical</b>		
Identification	Positive	TLC
Appearance	White crystalline powder	Visual
Odor	Characteristic	Organoleptic
Melting Point	78 – 82 °C	USP40-NF35<741>
Optical Rotation	+103.0° – +108.0 °	USP40-NF35<781>
Powder Size	≥ 95% through 30 mesh	USP #30 Sieve
Bulk Density	0.40 – 0.70 g/mL	USP40-NF35<616>
Tapped Density	0.60 – 0.90 g/mL	USP40-NF35<616>
Loss on Drying	13.0% – 17.0%	USP40-NF35<731>
Residue on Ignition	≤ 0.1%	USP40-NF35<281>
Residual Solvents	USP<467>	USP40-NF35<467>
Pesticide Residues	USP<561>	USP40-NF35<561>
Solubility	Clear and colorless	H <sub>2</sub> O, 10%
Aflatoxins	≤ 20 ppb	USP40-NF35<561>
<b>Heavy Metals</b>		
Total Heavy Metals	≤ 10 µg/g	USP40-NF35<231>
Arsenic (As)	≤ 1.0 µg/g	ICP-MS
Cadmium (Cd)	≤ 0.5 µg/g	ICP-MS
Lead (Pb)	≤ 1.0 µg/g	ICP-MS
Mercury (Hg)	≤ 0.5 µg/g	ICP-MS
<b>Microbiology</b>		
Total Plate Count	≤ 1,000 cfu/g	USP40-NF35<2021>
Molds and Yeasts	≤ 100 cfu/g	USP40-NF35<2021>
Total Coliforms	< 10 cfu/g	USP40-NF35<2021>
<i>Salmonella</i>	Absence	USP40-NF35<2022>
<i>E. Coli</i>	Absence	USP40-NF35<2022>
<i>Staphylococcus aureus</i>	Absence	USP40-NF35<2022>
Quality Approved By:		Issued Date: <u>01-01-2018</u>