Valid from: HSA/LC 01-10-2012 Replaces: HSA/LC 21-10-2011

## Batch Release Certificate

Product name: Dextran 1 EP

Specification No.: 40011

Batch No.: xxxxxx

Manufacturing date: mmmm\_yyyy
Retest date (3 years): mmmm\_yyyy

Manufacturing sites: Pharmacosmos A/S, Roervangsvej 30, DK-4300 Holbaek, Denmark

DKMA\* No.: 254629

**GMP certificate No.:** DK API-H 00010511, DK API-V 00010511

FDA establishment No.: FEI 3003233785
FDA facility classification: Acceptable

EDQM\* certificate No.: R1-CEP 2003-165-Rev 02

Method:	Parameter:	Results of analysis:		Limits:
EP	Description:	Complies		White or almost white powder
EP	Solubility:	Complies		Very soluble in water, very slightly soluble in ethanol (96%)
EP	Specific rotation, (+/-) °:	+x.x		+148 – +164
EP	Color of solution (Absorbance at 375 nm, 15% sol., 1 cm):	x.xxx		≤0.12
EP	Infrared Absorption:	Complies	**	Complies
EP	Acidity or Alkalinity:	Complies		Complies
EP	Average molecular mass, Mw:	x,xxx		850 – 1,150
EP	<3 glucose units fraction, % w/w:	x		<15
EP	>9 glucose units fraction, % w/w:	x		<20
EP	Nitrogen containing substances, ppm	x		≤110
EP	Sodium chloride, % w/w:	x.xx		≤1.5
EP	Heavy metals, ppm lead:	x		<10
EP	Loss on drying (105°C, 5h), % w/w:	x.x		≤5.0
EP	Bacterial endotoxins, IU/g:	Complies		<25
EP	Microbial contamination, cfu/g:	Complies		≤100

References to official monographs are to be considered as current editions.

We hereby confirm that no class 1, class 2 and class 3 solvent, cf. EP 5.4 Residual solvents is used in the manufacturing of this product.

I hereby certify that the above information is authentic and accurate. This batch of Active Pharmaceutical Ingredient has been manufactured, including packaging and quality control at the above mentioned site in full compliance with the GMP requirements for active starting materials and with the above mentioned specifications. The batch processing, packaging and analysis records were reviewed and found to be in compliance with GMP.

Date (dd.mm.yyyy):	
	Qualified Person, Kim Nordfield, Ph.D., Pharmacy

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CVR NO.: DK15517085 VAT NO. EXPORT: DK29127204

<sup>\*)</sup> EDQM refers to 'European Directorate for the Quality of Medicines and healthcare'. DKMA refers to 'Danish Medicines Agency'.

<sup>\*\*)</sup> Test is not carried out routinely. The identification of the product is assured througt strict adherence to established GMP rules throughout the manufacturing procedure.