

PHARMACOSMOS A/S

Batch Release Certificate

Product name: Dextran 70 EP/USP

Specification No.: 40006

Batch No.: xxxxxx
Manufacturing date: mmmm_yyyy
Retest date (5 years): mmmm_yyyy

Manufacturing sites: Pharmacosmos A/S, Roervangsvej 30, DK-4300 Holbaek, Denmark
DKMA* No.: 254629
GMP certificate No.: DK API-H 00083617, DK API-V 00083617
FDA establishment No.: FEI 3002807874
FDA facility classification: Acceptable
EDQM* certificate No.: R1-CEP 1999-065-Rev 02

Method:	Parameter:	Results of analysis:	Limits:
EP	Appearance of powder:	Complies	White or almost white powder
USP	Infrared Absorption:	Complies	Absorption maxima corresponds with Dextran 70 RS
USP	Color of solution (Absorbance at 375 nm, 6% sol., 4 cm):	Complies	≤0.15
EP	Appearance of solution:	Complies	Complies
USP	pH (6% solution):	x.x	4.5 – 7.0
EP	Acidity or Alkalinity:	Complies	Complies
EP	Specific rotation, (+/-) °:	+x	+195 – +201
USP	Specific rotation, (+/-) °:	+x	+195 – +203
EP	Average molecular mass, Mw:	x,xxx	64,000 – 76,000
EP	Mw of 10% high fraction:	x,xxx	≤185,000
EP	Mw of 10% low fraction:	x,xxx	≥15,000
USP	Mn:	x,xxx	34,000 – 48,000
USP	Mw/Mn:	x.x	1.4 – 1.9
USP	Viscosity, intrinsic, ml/g:	x	24 – 29
USP	Nitrogen containing impurities, ppm N:	x	≤100
USP	Alcohol and related impurities:	Complies	Complies
EP	Residual solvent, % by GC:	Complies	** Complies
USP	Heavy metals, ppm lead:	Complies	≤5
USP	Sulfate, % w/w:	Complies	≤0.03
EP	Sulphated ash, % w/w:	x.x	≤0.3
EP	Loss on drying (105°C, 5h), % w/w:	x.x	≤7.0
USP	Loss on drying (105°C, 5h), % w/w:	x.x	≤7.0
USP	Bacterial endotoxins (6% sol.) EU/ml:	Complies	≤0.5
USP	Antigenic impurities:	Complies	Complies
EP	Total viable aerobic count (TAMC),	Complies	≤100
USP	Safety:	Complies	Complies

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

*) EDQM refers to 'European Directorate for the Quality of Medicines and Healthcare'. DKMA refers to 'Danish Medicines Agency'

***) Test is not carried out according to approval from EDQM. No class 1, class 2 and class 3 solvent, cf. EP 5.4. Residual solvent, is used in the manufacturing of this product.

CERTIFICATE OF CONFORMITY

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, Heidi Skjødt Andersen, M.Sc. Pharm