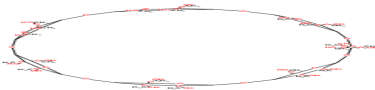




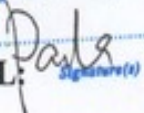
HANGZHOU DINGYAN CHEM CO., LTD
Tel:86-571-87157530 Fax:86-571-87156470
Email:sales@dingyanchem.com

CERTIFICATE OF ANALYSIS

NO: DYC081502273

Product name	Hydroxypropyl-beta-cyclodextrin(UPS35-NF30)
CAS Number	94035-02-6;128446-35-5;136019-12-0
Molecule Structure	
Molecule Formula	C105H196O56
Batch number	20140521
Manf&Exp. Date	2014-05-21,2016-05-20
Testing date	2014-05-22

Items	Standard	Result
Appearance	white powder, insipid, innocent	Qualify
Assay	≥98%	99.5%
Degree of Substitution	2.8-10.5	5.5
Clarity of solution	50%(w/v) water solution is clear	clear
Identification(IR)	same absorption bands with USP Hydroxypropyl Betadex RS	Qualify
Loss on Drying	≤10%	6%
Conductivity	10%(w/v) water solution ≤200μS/cm	150
Propylene oxide	≤1ppm	<0.18ppm
Propylene glycol	≤2.5%	0.30%
Sum of Other Impurities	≤1%	0.51%
Betadex	≤1.5%	0.25%
Residue on Ignition	≤0.2%	0.10%
Heavy Metal	≤20ppm	<20ppm
chloride	≤0.05%	<0.05%
TAMC(cfu/g)	≤1000	150
TYMC(cfu/g)	≤100	Absent
Salmonella/E. Coli (cfu/g)	Absent	Absent
Conclusion: According to standards of USP35-NF30, the product is Qualified.		

Hangzhou Dingyan Chem Co., Ltd.
Quality Control
QUALITY CONTROL:  CHECK: 姚仙娟 INSPECTOR: 刘清风