

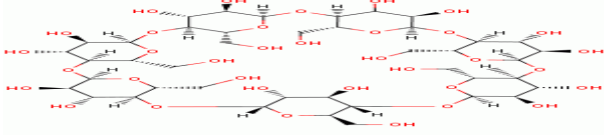


# HAIQIANG CHEMICALS CO., LTD

PHONE: 86-571-86465881, FAX: 86-571-86414728 sales@haiqiangchem.com

## CERTIFICATE OF ANALYSIS

NO: HQC081212066

Product name	beta-cyclodextrin
CAS Number	7585-39-9
Molecule Structure	
Molecule Formula	C <sub>42</sub> H <sub>72</sub> O <sub>36</sub>
Batch number	201201106
Manufacture Date	2012-11-11
Testing date	2012-11-11

Items	Standard	Result
Appearance	White crystal or crystalline powder	White crystalline powder
Assay	98.0-102.0%	99.5%
Specific Optical Rotation	+159° -+164°	+162°
Identification	Positive	Positive
PH	5.0-8.0	6.3
Solution clarity	Colorless, and color with 2max	Colorless, clear
Reducing sugar	1.0% max	0.10%
Loss on drying	14.0% max	10.80%
Residue on ignition	0.1% max	0.02%
Heavy metals	10ppm max	Complies
Microbial limit	Bacteria: 1000cfu/g max Mould: 100cfu/g max Live mites, Escherichia coli:N.D	10cfu/g max N.D N.D

HAIQIANG CHEMICALS CO.LTD  
QUALITY CONTROL:  
QUALITY CONTROL DEP.

CHECK:姚仙娟

INSPECTOR: 刘清风

Add: RM1605,ZhongDa Plaza,Building 1,NO.366, Zhongshan North Road, Hangzhou, China.