



CERTIFICATE OF ANALYSIS

Product name	Hydroxyethyl Starch130/0.4		
Batch No.	18021301	Mfg. Date	2018.02.13
Report Date	2018.02.13	Exp. Date	2020.02
Package	25kg/drum	Quantity	1500kg

Inspection Items	Accepted Standard	Results
Appearance	White or off white powder	Off white powder
Optical rotation	+ 182.0 ° ~ + 192.0 °	+ 187 °
clarity and color of solution	λ 400nm absorbance <0.05,turbidity not deeper than NO2 standard	Complies
Identification	(1)To complies positive reaction	Complies
	(2) complies with standard	Complies
pH	4.5-6.5	5.0
Intrinsic viscosity $[\eta]$	13.0-17.0	14.8
Heavy metals	\leq 10ppm	Complies
Loss on drying	\leq 5.0%	2.3%
Sodium chloride(NaCl)	\leq 0.75%	0.05%
MS	0.38-0.45	0.41
Glycol	\leq 0.062%	Complies
Ethylene oxide	\leq 0.001%	Complies
Chlorethyl alcohol	\leq 0.0005%	Complies
Molecular Weight (MW) and molecular weight distribution		
-Medium Mw	110000-150000	128200
-Mw at 10 per cent highest	\leq 380000	275450
Mw at 10 per cent lowest	\geq 15000	42515
Bacterial endotoxins	\leq 10EU/g	Complies
Undue toxicity	Should complies	Complies
Microbial limit	Should complies	Complies
Assay	\geq 98.5%(on dry base ,deducts the sodium chloride)	99.6%
Conclusion : Complies with enterprise standard		

Analyst :shilijuan

Checker:wuaho

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