



瑾 岚 医 药 技 术 开 发 有 限 公 司
 JINLAN PHARM-DRUGS TECHNOLOGY CO., LIMITED
 Hangzhou ROYAL Import & Export Co.,Ltd.

Certificate of Analysis

Product Name	Chitosan hydrochloride	Batch No.:	RY190319
Quantity:	12KG	CAS NO.	70694-72-3
Manufacture Date:	2019.03.19	Expiry Date:	2021.03.18
Item	Specification	Analytical Result	
Appearance	White or light-yellow, free-flowing powder	Conforms	
Bulk density	$\geq 0.25\text{g/ml}$	0.28g/ml	
Appearance of solution	Transparent colorless to light yellow	Conforms	
Particle size	Passed 40 mesh	Conforms	
PH	4.0 – 6.0	4.3	
Deacetylated degree	70%~95.0%	90.35%	
Infrared absorption	Meet the standard	Conforms	
Chloride testing	Meet the standard	Conforms	
Ammonia reaction	Have a large amount of gelatinous material forming	Conforms	
Acetone reaction	Have a large amount of gelatinous material forming	Conforms	
Matter insoluble in water	$\leq 0.5\%$	0.11%	
Heavy metals	$\leq 20\text{PPM}$	Conforms	
Water	$\leq 10.0\%$	4.55%	
Sulphated ash	$\leq 1.0\%$	0.10%	
Chloride	10%~20%	12.67%	
Viscosity	10~120mPa.s(cps)(put 1% Chitosan hcl dissolve in 20°C water solution)	12mPa.s	
Microbiological test	Total plate count	$\leq 1000\text{CFU/g}$	1000CFU/g
	Yeast and moulds:	$\leq 100\text{CFU/g}$	100CFU/g
	Coliforms group	$\leq 30\text{MPN}/100\text{g}$	<30MPN/100g
	Salmonella	should not be detected	N.D.
	Staphylococcus	should not be detected	N.D.
Standard: it conforms to enterprise standard.			



Tested by: Cherry

Checked by: Alice

Approved by: Mich