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## CERTIFICATION OF ANALYSIS

Product Name	MONOAMMONIUM GLYCYRRHIZINATE		
Batch No.	G20210702	Quantity	500kgs
Packing	20kgs/drum	Production Date	Jul. 18, 2021
CAS No.	53956-04-0	Expiry Date	Jul. 17, 2026

ITEM	SPECIFICATION	RESULT
<b>CHARACTERS</b>		
Appearance	White or yellowish-white, hygroscopic powder	White powder
Solubility	Complies with the CRS	Complies
<b>IDENTIFICATION</b>		
Infrared spectrum	Corresponding to Reference Spectrum	Complies
Alkaline reaction	Complies with the CRS	Complies
<b>TEST</b>		
Appearance of solution	Clear and not more intensely coloured than reference solution BY7	Complies
Specific optical rotation	From +49.0 to +54.0	+53.0
<b>RELATED SUBSTANCES</b>		
18 $\alpha$ -glycyrrhizic acid	NMT 10.0%	8.6%
Impurity A	NMT 5.0%	4.6%
Any other impurity	NMT 2.0%	1.2%
Sum or other impurities	NMT 7.0 %	6.2%
Heavy Metals	NMT 20ppm	NMT20ppm
Water	NMT 6.0%	4.8%
Sulphated ash	NMT 0.2%	0.06%
Residual ethanol	NMT 0.5%	0.05%
<b>ASSAY</b>		
Ammonium Glycyrrhizate	From 98.0% to 102.0% (anhydrous substance)	100.3%
<b>CONCLUSION</b>		
Complies European Pharmacopoeia 8.0 Standard		

Storage: In an airtight container

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