

Shine Star (Hubei) Biological Engineering Co., Ltd.

Headquarters: No. 1 Yanjiang Road, Gong An, Jingzhou, Hubei, 434300 P. R .China
Tel: +86-27 8578 6222 Fax: +86-27 8578 6555
E-mail: sales@Shine-Star.com.cn www.Shine-Star.com.cn

CERTIFICATE OF ANALYSIS

Product Name:	L-Tyrosine	CAS No.:	60-18-4
Quantity:	Sample	Manufacture Date:	Dec. 12, 2011
Batch No.:	5611439	Analysis Date:	Dec. 16, 2011
Quality Standard:	USP31	Expiry Date:	Dec. 11, 2013
Test Items	Limit	Result	
Appearance	white crystalline powder or colorless crystals	conform	
Identification	as per USP31	conform	
Specific rotation	-9.8° to -11.2°	-10.8°	
Loss on drying	not more than 0.3%	0.12%	
Residue on ignition	not more than 0.4%	0.04%	
Chloride	not more than 0.04%	<0.04%	
Sulfate	not more than 0.04%	<0.04%	
Iron	not more than 0.003%	<0.003%	
Heavy metals	not more than 0.0015%	<0.0015%	
Chromatographic purity	as per USP31	conform	
Organic volatile impurities	as per USP31	conform	
Residual solvents	as per USP31	conform	
Assay	98.5% to 101.5%	99.67%	
Conclusion: The products conform to USP31 standard.			
Analyst: 涂静 胡昌清 张冰 万东静		Verifier: 郭刚	
Storage: Preserve in well-closed containers and protected from light			