

Office Add:  
No.18 Fenghuinanlu, Tangfeng Guoji  
Xianyang City, Shaanxi Province, China.

www.fzbiotech.com  
Email: sales@fengzusw.com  
Tel.: 86-029-8918-1410

Product Name	Reduced Glutathione	Molecular Formula	C10H17N3O6S
Batch No.	FZMRG170612	Test sample qty.	50g
Produce date	2017.06.12	Expiry date	2019.06.11
Reference standard: USP36 and European Pharmacopoeia 8.0			

ITEM	STANDARD		RESULT
Assay	98.0%-101.0%		98.50%
Character	Appearance	White or almost white, crystalline powder or colorless crystals.	Qualified
	Solubility	Freely soluble in water, very slightly soluble in ethanol (96 %) and in methylene chloride.	Qualified
Identification	Specific optical	-15.5° to -17.5° (dried substance)	-16.5°
	Infrared absorption spectrophotometry	Same as L-Glutathione, reduced CRS	Qualified
Impurity	L-cysteinylglycine	Maximum 0.5 %	0.21%
	Cysteine	Maximum 0.5 %	0.25%
	L-glutathione oxidized	Maximum 1.5 %	0.89%
	L-γ-glutamyl-L-cysteine	Maximum 1.0 %	0.55%
	Unknown structure (product of	Maximum 0.5 %	0.32%
Residue on ignition	Maximum 0.1 %		Qualified
Loss on drying	Maximum 0.5%		Qualified
Chlorides	Maximum 200 ppm		Qualified
Sulphates	Maximum 300 ppm		Qualified
Ammonium	Maximum 200 ppm		Qualified
Iron	Maximum 10 ppm.		Qualified
Heavy metals	Maximum 10 ppm		Qualified
Arsenic	Maximum 2 ppm		Qualified
Conclusion :	This product conforms to USP38 and European Pharmacopoeia 8.0.		

**Operator: Kai Guo**

**Approval: Qiang Liu**

