

Certificate of Analysis

Product

Batch No Analysis Date Date of Manufacture

Expiry Date/Re-Test Date Molecular Formula Molecular Weight 12381 - L-Glutamine extrapure CHR, 99% - [56-85-9]

9604086

13-Aug-2022 August 2022 August 2027 C5H10N2O3

146.15

Test Parameters	Standards	Actual Results
Appearance (Colour)	White	White
Appearance (Form)	Crystalline powder	Crystalline powder
Solubility (Turbidity) 10% solution 2N HCl	Clear	Clear
Solubility (Colour) 10% solution 2N HCl	Colourless	Colourless
Assay	min. 99%	99.1%
Specific rotation [α]	+31.5° to +32.5° (C=2 , N HCl)	+31.6°
Loss on drying	max. 0.5%	0.2%
Sulphated Ash	max. 0.1%	0.08%
Chloride (CI)	max. 0.01%	Passes
Sulphate (SO4)	max. 0.01%	Passes
Iron (Fe)	max. 0.001%	Passes
Heavy Metals (Pb)	max. 0.001%	Passes
Ammonium (NH4)	max. 0.01%	Passes
Homogeneity by TLC	Passes test	Passes

FRM/82/11/4/12381 Rev No. 1 Date 01/11/2015

Prepared by Nilesh

In compliance with the standard specifications of SRL

Plant Site 2 : H-4, MIDC, Taloja – 410 208, Maharashtra, India