

Chem-Impex International, Inc.

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Certificate of Analysis

Catalogue Number	43353
Product	Piperazine dihydrochloride monohydrate
Lot Number	003348-2122-44
CAS Number	142-64-3
Molecular Formula	C ₄ H ₁₀ N ₂ •2HCl•H ₂ O
Molecular Weight	177.07

Appearance	White crystalline powder Hygroscopic!
Solubility	Soluble in water.
Anion	Chloride content : 39.59% (by Potentiometer)
Water Content (Karl Fisher)	6.3%
Related Substances	Any unknown single maximum impurity : Not detected Total impurities : 0.014% Monoethanolamine : 0.010% (by GC)
Assay by titration	99.04%
Purity by GC	99.12%
Storage	Store at RT
Additional Information	Test for chlorine : Positive test for chlorine
Remarks	See material safety data sheet for additional information For laboratory use only

The foregoing is a copy of the Certificate of Analysis as provided by our supplier



Bala Kumar
Quality Control Manager