

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Specification Sheet

Product Name: **Piperazine**
 Specifications & Purity: **UltraBio™, anhydrous, ≥99%(T)**
 SKU #: **P755827**

Parameter	Limit Values
Appearance(P755827)	Colorless or White Powder or Crystals or Flakes
Assay(Titration by HCL,1M)	98.5-101.5 (%)
Water by Karl Fischer	0-1 (%)
Proton NMR spectrum	Conforms to Structure
Aluminium(Al)	0-5 (ppm)
Barium(Ba)	0-5 (ppm)
Bismuth(Bi)	0-5 (ppm)
Calcium(Ca)	0-10 (ppm)
Cadmium(Cd)	0-5 (ppm)
Cobalt (Co)	0-5 (ppm)
Chromium(Cr)	0-5 (ppm)
Copper(Cu)	0-5 (ppm)
Iron(Fe)	0-5 (ppm)
Potassium(K)	0-50 (ppm)
Lithium(Li)	0-5 (ppm)
Magnesium (Mg)	0-5 (ppm)
Manganese(Mn)	0-5 (ppm)
Molybdenum(Mo)	0-5 (ppm)
Sodium(Na)	0-50 (ppm)
Nickel(Ni)	0-5 (ppm)
Lead(Pb)	0-5 (ppm)
Strontium(Sr)	0-5 (ppm)
Zinc(Zn)	0-5 (ppm)
Arsenic traces(MHS-AAS)	0-0.1 (ppm)
Total sulfur as SO ₄ (ICP)	0-50 (ppm)
Chloride (Cl ⁻)	0-50 (ppm)
Solubility(0.258 G IN 30 ML H ₂ O(0.1 M)),clear colorless	Pass
PH(Solution)	11.0-12.5
Residue (filter test)	no residue
UV-ABS.at 260 nm	0-0.035
UV-ABS.at 280 nm	0-0.01