

3050 Spruce Street, Saint Louis, MO 63103, USA

Website: www.sigmaaldrich.com

Email USA: techserv@sial.com

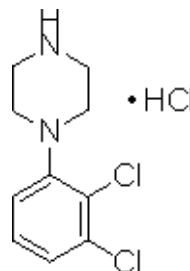
Outside USA: eurtechserv@sial.com

## Certificate of Analysis

Product Name:

1-(2,3-Dichlorophenyl)piperazine hydrochloride - 97%

**Product Number:** 679135  
**Lot Number:** MKBJ6595V  
**Brand:** ALDRICH  
**CAS Number:** 119532-26-2  
**MDL Number:** MFCD00190238  
**Formula:** C<sub>10</sub>H<sub>13</sub>Cl<sub>2</sub>N<sub>2</sub>  
**Formula Weight:** 267.58 g/mol  
**Quality Release Date:** 19 DEC 2011



Test	Specification	Result
Appearance (Color)	White to Tan	White
Appearance (Form)	Crystal to Powder	Powder
Infrared spectrum	Conforms to Structure	Conforms
Titration by AgNO <sub>3</sub>	96.5 - 103.5 %	98.4 %
Purity (HPLC)	≥ 96.5 %	99.9 %

Jamie Gleason, Manager  
Quality Control  
Milwaukee, Wisconsin US

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.