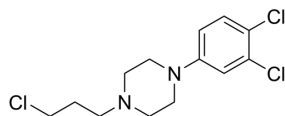


## Certificate of Analysis

**Product Name:** 1-(3-Chloropropyl)-4-(3,4-dichlorophenyl)piperazine  
**Cat. No.:** CS-0865120  
**CAS No.:** 101364-27-6  
**Batch No.:** 313715  
**Chemical Name:** Piperazine, 1-(3-chloropropyl)-4-(3,4-dichlorophenyl)-

### PHYSICAL AND CHEMICAL PROPERTIES

**Molecular Formula:** C<sub>13</sub>H<sub>17</sub>Cl<sub>3</sub>N<sub>2</sub>  
**Molecular Weight:** 307.65  
**Storage:** 2-8°C, protect from light  
**Chemical Structure:**



### ANALYTICAL DATA

**Appearance:** Colorless to light yellow (Liquid)  
**<sup>1</sup>H NMR Spectrum:** Consistent with structure  
**Purity (HPLC):** 99.94%  
**Conclusion:** The product has been tested and complies with the given specifications.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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