

# *Chem-Impex International, Inc.*

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825 Dillon Drive

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## *Certificate of Analysis*

<b>Catalogue Number</b>	31911
<b>Lot Number</b>	001696-20170901
<b>Product</b>	<b>1-[2-(2-Hydroxyethoxy)ethyl]piperazine</b>

2-[2-(1-Piperazinyl)ethoxy]ethanol

<b>CAS Number</b>	13349-82-1
<b>Molecular Formula</b>	C <sub>8</sub> H <sub>18</sub> N <sub>2</sub> O <sub>2</sub>

<b>Molecular Weight</b>	174.24
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<b>Appearance</b>	Pale yellow to yellow viscous liquid
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<b>Water Content (Karl Fisher)</b>	0.55%
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<b>Related Substances</b>	2-Chloroethanol: 0.015% Piperazine: 0.082% 2-Chloroethoxy ethanol: 0.007% N-(2-Hydroxyethyl)piperazine: 0.034% Any other single impurity: 0.035% Total impurities: 0.18%
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<b>Purity by HPLC</b>	99.83%
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<b>Storage</b>	Store at RT
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<b>Remarks</b>	See material safety data sheet for additional information For laboratory use only
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**The foregoing is a copy of the Certificate of Analysis as provided by our supplier**



**Bala Kumar**  
**Quality Control Manager**