

## Properties and Standard Specifications

### Piperazine 100%, flakes

#### Physical Properties

Product Name	:	Piperazine - Pip (100%, flakes)
Molecule formula	:	$\begin{array}{c} \text{C}_2\text{H}_4 \\ \diagup \quad \diagdown \\ \text{HN} \quad \quad \text{NH} \\ \diagdown \quad \diagup \\ \text{C}_2\text{H}_4 \end{array}$
Appearance	:	White flakes
Relative Density (124/4 °C)	:	0.876
Boiling Point at 101.3 kPa	[°C] :	148
at 1.33 kPa	[°C] :	--
Freezing Point	[°C] :	110
Vapour Pressure at 20 °C	[Pa] :	280
Total Nitrogen content	[wt. %] :	32.5
Viscosity at 20 °C	[mPa.s] :	--

#### Standard Specifications

Item	Unit	Value			Method of Analysis
		Minimum	Typical	Maximum	
Appearance	-	white flakes			DEL 119
Colour	APHA		< 10	50	DEL 116
Water	weight %		< 0.30	0.5	DEL 115
PIP content	weight %	99.0	> 99.5		DEL 108