

**PROPERTIES OF PENNAD 150 AND  
COMPETITIVE STEAM CONDENSATE  
NEUTRALIZING AMINES**

Product	Pennad 150	Morpholine	Cyclohexyl-amine	AMP-95
% Amine	99+	98+	99+	95
Boiling Point (°C)	163	129	134	165
Flash Point (°F)	125	95	88	182
Azetrope @ 1 atm	-	None	-	None
Boiling Point (°C)	99	-	97	-
% Amine	25	-	44	-
Basicity @ 20°C $K_B \times 10^6$	72	2.4	410	66
pH				
$10^{-2}N$	10.9	-	11.3	10.8
$10^{-3}N$	10.3	9.8	10.7	10.2
Vapor Liquid Distribution Ratios of Pure Compound @ 1 atm				
@ pH 10	1.7	0.45	4.4	0.17
@ pH 9	0.9	-	1.4	-
@ pH 8	0.5	-	0.9	-
Molecular Weight	117.2	87.1	99.2	89.1
Freezing Point (°F)	-70°F	23	0	30

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