PETRONAS

ETHANOLAMINES

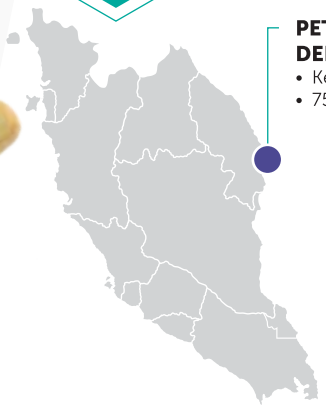
PETRONAS CHEMICALS GROUP BERHAD
CHEMISTRY FOR GROWTH

ETHANOLAMINES

Ethanolamines are organic compounds which contain both amine and alcohol chemical groups. A colourless, thick liquid with ammonia-like odours, it is present in many consumer products such as cosmetics, personal care products and household cleaning products. PCG produces Monoethanolamine (MEA), Diethanolamine (DEA) and Triethanolamine (TEA).

PCG Ethanolamines Plant

ISO 9001:2008, ISO 14001:2004



PETRONAS CHEMICALS DERIVATIVES SDN. BHD. (PCDSB)
- Kertih, Terengganu
- 75 KMTPA Ethanolamines

Product Applications

APPLICATIONS	FUNCTIONS	MEA	DEA	TEA
Agricultural chemicals	Active ingredient		•	
Cement grinding aids	Reduce agglomeration energy		•	•
PU Adhesives	Cross-linking agent			•
Detergents	Impart reserve alkalinity and anti-redeposition agent	•	•	•
Personal care cleaners	Emulsion stabiliser	•		•
	Intermediate to produce fatty acid amides		•	
	Foam stabiliser	•		•
Gas treating	H_2S removal	•	•	
Metal working	Corrosion inhibitor	•	•	•
Textile finishing	Fabric dyeability enhancer	•	•	•
Wood treating	Improve resistance to pests & decay	•		

Product Specifications

COMPONENTS	UNITS	MEA	MEA LFG	MEA 90 LFG	MEA PLUS	DEA	TEA 99%	TEA Comm	TEA 90%	TEA 85% LFG
Monoethanolamine	% Weight	99.5 min	84.0 - 86.0	89.0 - 91.0	99.5 min	0.5 max	0.10 max	0.10 max	-	-
Diethanolamine	% Weight	0.2 max	0.2 max	0.2 max	0.2 max	99.00 min	0.5 max	11.00 - 15.00	0.9 max	-
Triethanolamine	% Weight	-	-	-	-	0.50 max	99.00 min	85.00 - 89.00	89.00 - 91.00	84.00 - 86.00
Water	% Weight	0.3 max	-	9.0 – 11.0	0.3 max	0.15 max	0.2 max	0.2 max	9.0 - 11.0	14.0 - 16.0
Colour	Pt-Co	15 max	15 max	15 max	15 max	15 max	40 max	40 max	40 max	40 max
Iron	ppm	-	-	-	-	-	10.0 max	-	-	-
Specific Gravity @ 20/20°C	°C	-	1.025 - 1.029	-	-	-	-	-	-	1.120- 1.125