





		Diethanolamine (USP-NF) pharma grade	de PanReac AppliChem	Issue Date Prepared by Reviewed by Version no.	March-23 Sr. Tech Lead Manager Technical CLYZO/PAN/191287/01
	Product Code CAS NO. Manufacturer Name	191287 111-42-2 PanReac AppliChem			
		Manufacturer COA		Pharmacopeial Specifications	
. No.	Test	Complies USP-NF	USP 2022	EP Version 11.0	JP 18
1	Descriprion	Clear, colorless liquid	White or clear, colorless crystals,	Product Not official in European	Product Not Official in Japanese
			deliquescing in moist air; or colorless liquid.	Pharmacopoeia	Pharmacopoeia
2	Solubility	Miscible with water, alcohol, acetone, chloroform and	Miscible with water, with alcohol, with	1	
		glycerin. Slightly soluble to insoluble in benzene, ether	acetone, with chloroform, and with glycerin.		
		and petroleum ether.	Slightly soluble to insoluble in benzene, in		
			ether, and in petroleum ether.		
3	Identification 1	Passses test	The infrared absorption spectrum obtained		
			with sample should be concordant with		
			spectrum obtained with diethanolamine		
			reference/wprking standard		
4	Freezing point	Between 27 ⁰ C and 28 ⁰ C	Not mentioned		
5	Triethanolamine	NMT 1.0%	NMT 1.0%		
6	Refractive Index	Between 1.473 and 1.476	Between 1.473 and 1.476		
7	Water	NMT 0.15%	NMT 0.15%		
8	Assay	Between 98.5% and 101.0%	etween 98.5% and 101.0%		
9	Elemental impurities				
	Cd	NMT 0.5 ppm	Not mentioned		
	Pb	NMT 0.5 ppm			
	Assay	NMT 1.5 ppm			
	Hg	NMT 1.5 ppm			
	со	NMT 5 ppm			
	V	NMT 10 ppm			
	Ni	NMT 20 ppm			
- F	TI	NMT 0.8 ppm			
	Au	NMT 10 ppm			
	Pd	NMT 10 ppm			
	Ir	NMT 10 ppm			
	Os	NMT 10 ppm			
	Rh	NMT 10 ppm			
	Ru	NMT 10 ppm			
-	Se	NMT 15 ppm			
	Ag	NMT 15 ppm			
-	Pt	NMT 10 ppm			
	Li	NMT 55 ppm			
-	Sb	NMT 120 ppm			
-	Ba	NMT 140 ppm			
	Mo	NMT 25 ppm			
- F	Cu	NMT 250 ppm			
	Sn	NMT 600 ppm			
	Cr	NMT 25 ppm		4	
	Storage	Keep container sealed.	Preserve in tight, light-resistant containers.		