



Pharma Grade Refined Glycerine

SPECIFICATION	UNIT	METHOD & REFERENCE VALUES			TEST RESULT	CONCLUSION
		METHOD	MIN	MAX		
Appearance	-	EP 11	Clear, Colorless or Almost Colorless		Clear, Colorless or Almost Colorless	Complies
Appearance of Solution	-	EP 11 2.2.1/2.2.2	The solution is colourless		The solution is colourless	Complies
Odour	-	-	Odourless, Slight Characteristic Odour		Odourless, Slight Characteristic Odour	Complies
Color Alpha	APHA	ISO 2111	...	10	< 5	Complies
Relative Density (20°C)	gr/cm ³	EP 2.2.5	1,258	1,268	1,2628	Complies
Glycerine Content (Assay)	%	EP 11	99,70%	...	99,85	Complies
Sulphate Content (As SO ₄)	ppm(mg/kg)	TS 829	...	10	...	Complies
Ash	%	TS 829	...	0,01	< 0,001	Complies
Water Content (Mouisture)	%	EP 2.5.12	...	2	0,06	Complies
Arsenic (As)	ppm(mg/kg)	NMKL 186	...	0.1	0,023	Complies
Cadmium (Cd)	ppm(mg/kg)	NMKL-186	...	0.1	Not Detected	Complies
Lead (Pb)	ppm(mg/kg)	NMKL-186	...	0.1	Not Detected	Complies
Mercury (Hg)	ppm(mg/kg)	NMKL-186	...	0.1	Not Detected	Complies
Reducing Agents	-	TS 829	Suitable		Suitable	Complies
Copper (Cu)	-	TS 829	Suitable		Suitable	Complies
Iron (Fe)	ppm(mg/kg)	TS 829	...	0,5	Not Detected	Complies
Methanol	%	TS 829	-		Not Detected	Complies
Nitrogen	%	TS 829	-		< %0,05	Complies
Chlorides	ppm(mg/kg)	EP 2.4.4	...	10	< 1	Complies
Impurity A-diethylene Glycol	%	EP 2.2.28	...	0.1	< 0,1	Complies
Impurities with RT-Glycerol	%	EP 2.2.28	...	0.1	< 0,1	Complies
Impurities with RT>Glycerol	%	EP 2.2.28	...	0.5	< 0,5	Complies
Chlorinated Compounds	ppm(mg/kg)	USP	...	30	-	Complies
Basicity (as Na ₂ O)	-	TS 829	Below the limit of determination		Below the limit of determination	Complies
Acidity or Alkalinity	ml 0.1 M NaOH	EP 11	...	0,2	0.05	Complies
Halogenetad Compounds	ppm(mg/kg)	EP 11	...	35	< 5	Complies
Fatty Acids & Esters	%	TS 829	...	0,1	0,013	Complies
Non- Volatile Organic Residues	%	TS 829	...	5	0,016	Complies
Aldehydes (as CH ₂ O)	ppm(mg/kg)	EP 11	...	10	< 1	Complies
Esters	ml 0.1 M HCl	EP 11	8	...	8	Complies
Sugar	-	EP 11	The Solution is Clear and Blue		The Solution is Clear and Blue	Complies
Butanetriols	%	E 422 GC-MS	...	0,2	< 0,002	Complies
Identification A (Refractive Index 20 °C)	ND 20	EP 2.2.6	1,471	1,474	1,474	Complies
3-Monochleropropane-1,2-diol (3-MCPD)	ppm(mg/kg)	GC-MS/MS	...	0.1	< 0,05	Complies
Acrolein and Glycose Compounds	-	TS 829	Suitable		Suitable	Complies