

QUALITY CERTIFICATE

Product name: MACROGOL 4000
Quality: Ph.Eur.11.0.
Package: 1000 g
Formula: $\text{HO}(\text{C}_2\text{H}_4\text{O})_n\text{H}$
Rel. mol. weight: 3500-4500
Lot No.: GQ1961057
Manufacturing date: 04.2024.
Expiry date: 24.06.2027. (DMY)
Anal. No.: 19047H61057

	REQUIRED	MEASURED
Appearance:	white or almost white solid with a waxy or paraffin-like appearance	white, solid, paraffin-like substance
Identification test 'A'	identical	identical
Identification test 'C'	identical	identical
Appearance of solution	passes test	passes test
Alkalinity, acidity	passes test	passes test
Viscosity (dynamic)	110-170 mPa.s	126,2 mPa.s
Viscosity (kinematic)	102-158 mm ² s ⁻¹	115,69 mm ² s ⁻¹
Freezing point	53-59 °C	53,2 °C
Hydroxyl value	25-32	27,5
Reducing substances	passes test	passes test
Formaldehyde	max.30 ppm	<30 ppm
Ethylene oxide	max.1 ppm	<1 ppm
Dioxane	max.10 ppm	<10 ppm
Heavy metals (Pb)	max.20 ppm	<20 ppm
Ethylene glycol, diethylene glycol	max.0,4 %	0,20 %
Water (KF.)	max.2,0 %	0,31 %
Sulphated ash	max.0,2 %	0,07 %

The Product complies with the requirements of Ph.Eur.11.0.

Kiállítva: Halásztelek, 2024.06.25.


Nagy Balázs

minőségbiztosítási vezető

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