

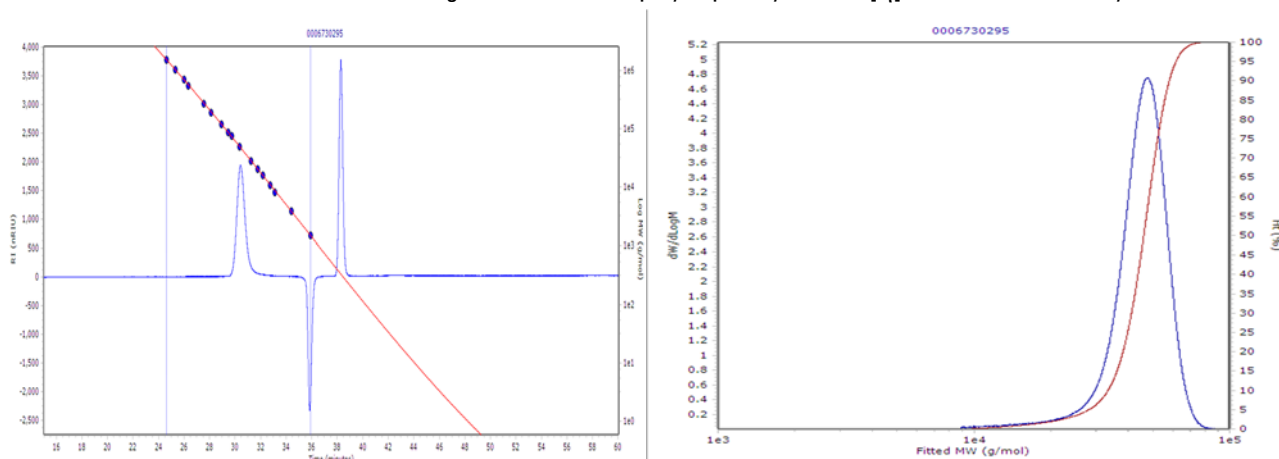
CERTIFICATE OF ANALYSIS

Product Polyethylene oxide
Batch Number 0006730295
Part Numbers PL2083-3001, PL2083-3005, PL2083-3010

Mp 47,700

	GPC	Light scattering	Viscometry
Mp (g/mol)	47,700		
Mn (g/mol)	42,900		
Mw (g/mol)	45,850	49,650	
Mv (g/mol)	45,500		
	Mw/Mn = 1.07		[η] = 0.6839 dl/g

Mp, Mn, Mw & Mv are the respective peak, number, weight and viscosity molecular weight averages
Mw/Mn = molecular weight distribution or polydispersity ratio [η] = Intrinsic viscosity



Analysis Conditions

	GPC	Light scattering	Viscometry
System	Agilent GPC Software	Agilent GPC Software	Agilent GPC Software
Detector	Refractive Index	390-MDS 15/90 LS	390-MDS Viscometer
Columns	PLaquagel-OH MIXED-H 4 x 8μm 300x7.5mm	PL aquagel-OH MIXED-H 8μm 300x7.5mm	PL aquagel-OH MIXED-H 8μm 300x7.5mm
Solvent	0.02% NaN ₃ Sol	0.02% NaN ₃ Sol	0.02% NaN ₃ Sol
Flow rate	1.0 ml / min	1.0 ml / min	1.0 ml / min
Injection volume	100μl	100μl	100μl
Sample concentration	0.05%	0.921 mg / ml	0.921 mg / ml
Temperature	Ambient	30°C	30°C
Calibrants	PEO/PEG	Polyethylene Oxide	Polyethylene Oxide
Angle		90°	
dn/dc		0.136 ml/g	

The above characterisation data has been measured according to our Quality Control procedures.

Certificate of Analysis valid until expiry date – 15th February 2029

Agilent Manufacturing Site: Essex Road, Church Stretton, Shropshire, SY6 6AX, UK

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COA STANDARDS 1 Rev 1.04