NOMISMA

PRODUCT INFORMATION SHEET

ANALYTICAL REFERENCE MATERIAL

Product Name: LG Polymer

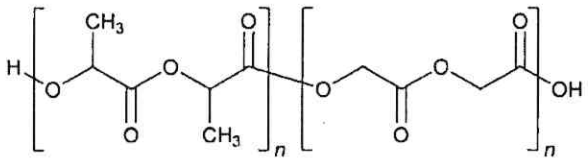
Description.: Acid Terminated, Lactide : Glycolide 85:15, Mw 7,000 – 17,000 Da

Item Code.: DLG852A

Batch No.: RSY00056

A. R. No.: RS26-0007

Chemical Information:



CAS Number:	26780-50-7
Molecular Formula:	$H[C_6H_8O_4]_n[C_4H_4O_4]_nOH$
Molecular Weight:	7,000 - 17,000 Da

Re-Test Date:

18-Feb-2027

Note: Use of the product after the retest date is done at customer discretion.

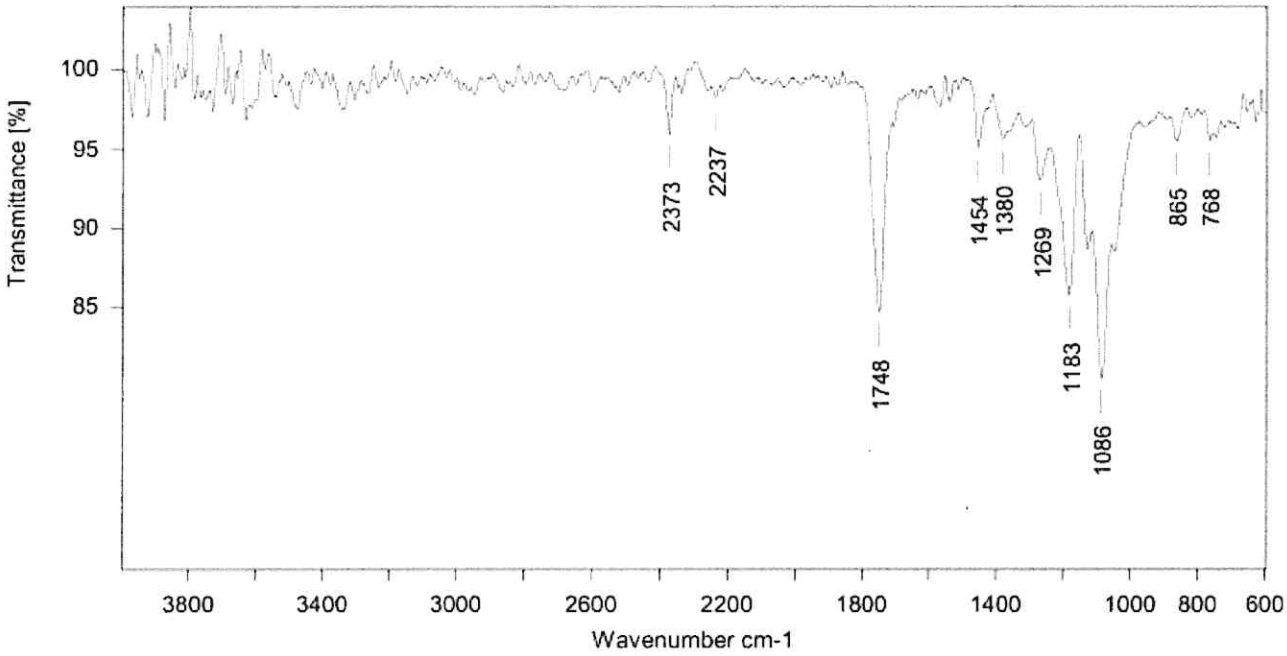
Additional Information:

Material is hygroscopic

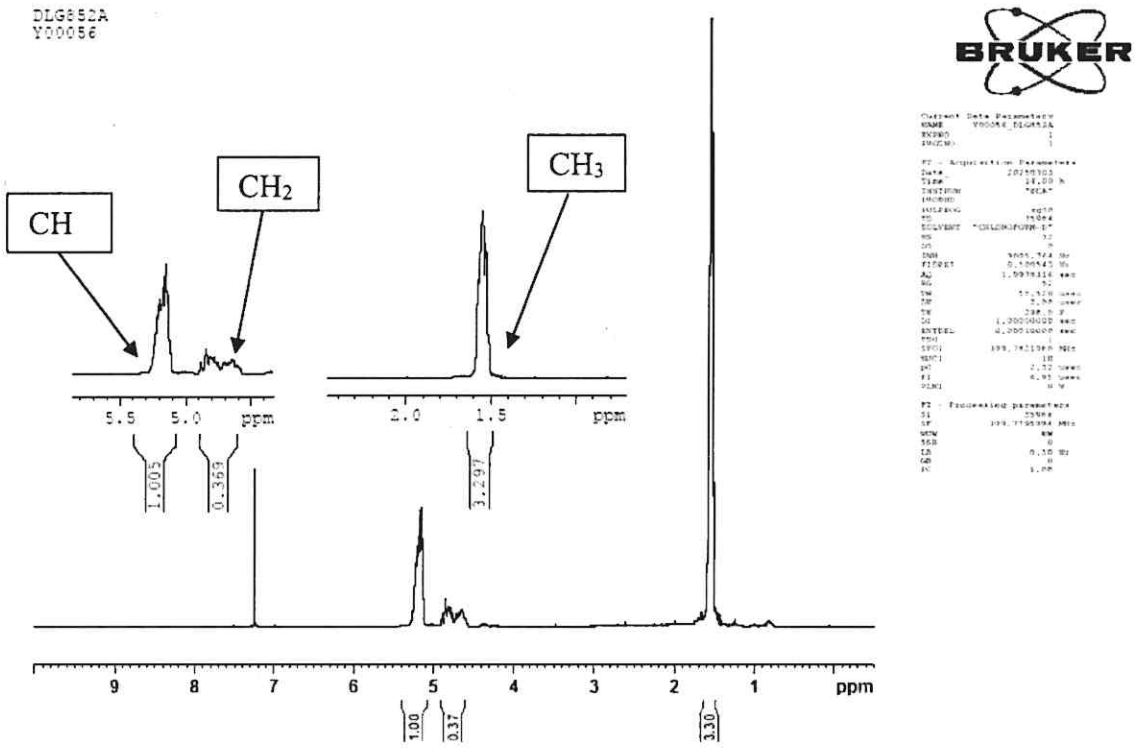
Tests and Results:

Test / Method	Results
Appearance	White Powder
Identification by ^{1}H NMR	Confirm to the Structure
Polymer Composition (DL -Lactide and Glycolide By ^{1}H NMR)	DL-Lactide = 84.4 %, Glycolide = 15.6%
Inherent Viscosity	0.19 dL/g
Residual Monomer (DL -Lactide and Glycolide by GC)	DL-Lactide = 0.19%, Glycolide = No Detected
Residual Solvent DMSO by GC	DMSO = 0.07%
Acid Number by titration	8.76 mg KOH/g
Residual Tin	Not Detected
Water Content by KF	0.27%
Heavy Metals	Complies
Residue on Ignition (Sulfated Ash)	0.05%
Molecular Weight (Mw) by GPC	14.0 kDa
Molecular Weight (Mn) by GPC	9.8 kDa
Polydispersity	1.41
Potency by CHN/S	99.90%

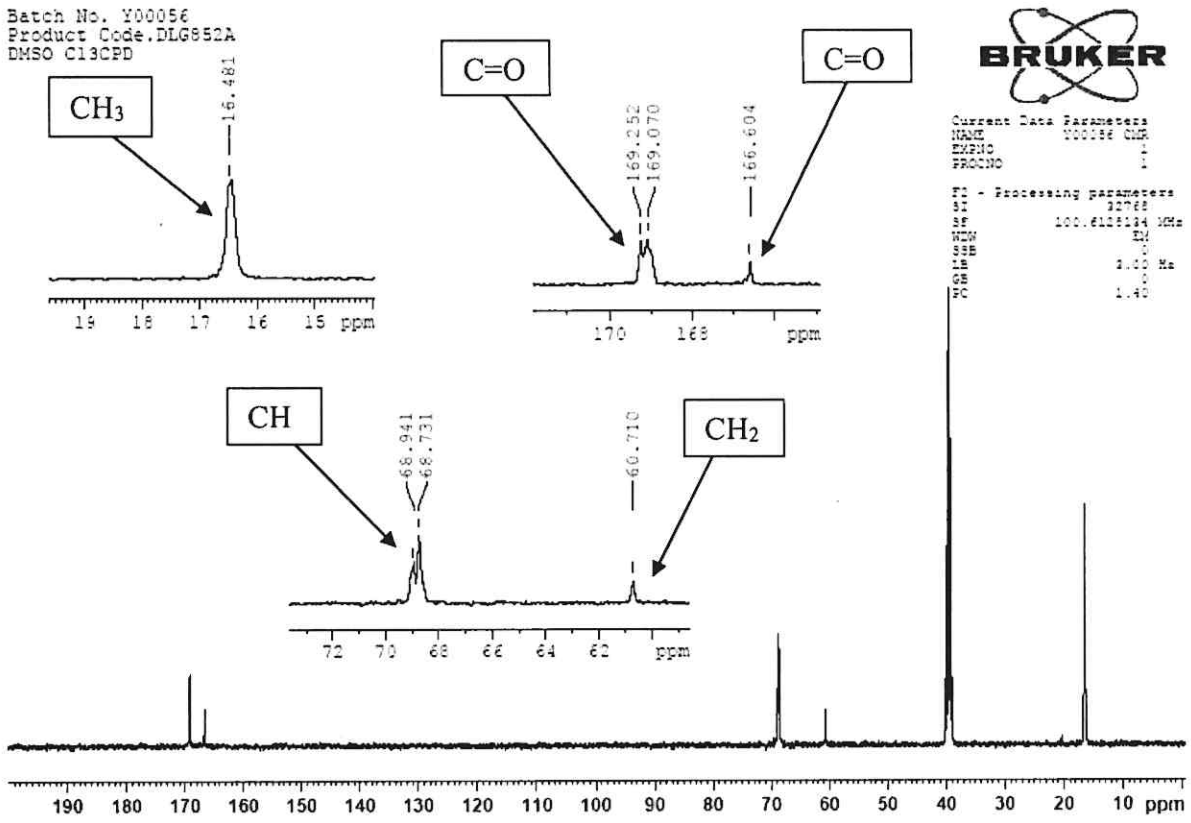
IR Spectrum (ATR):



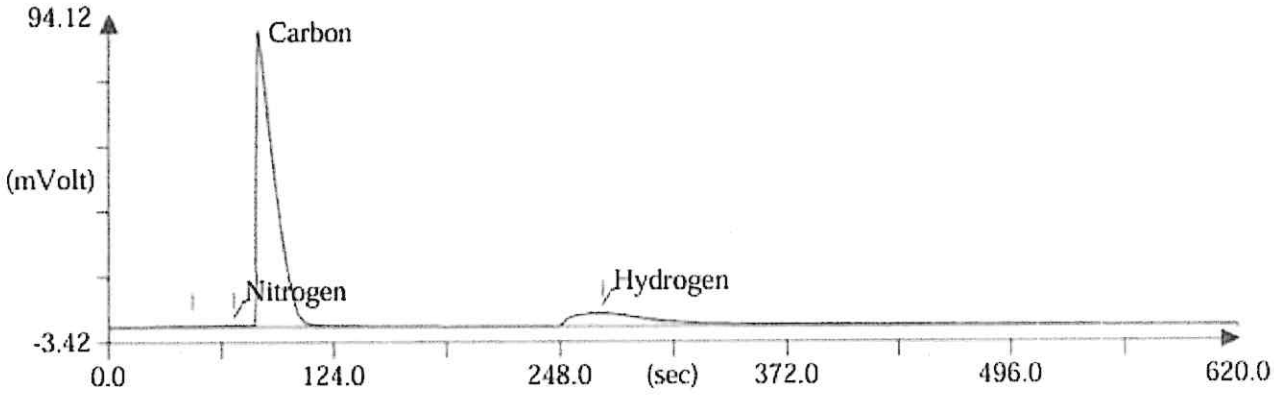
^{1}H NMR Spectrum Recorded in CDCl3:



^{13}C NMR Spectrum Recorded in DMSO:



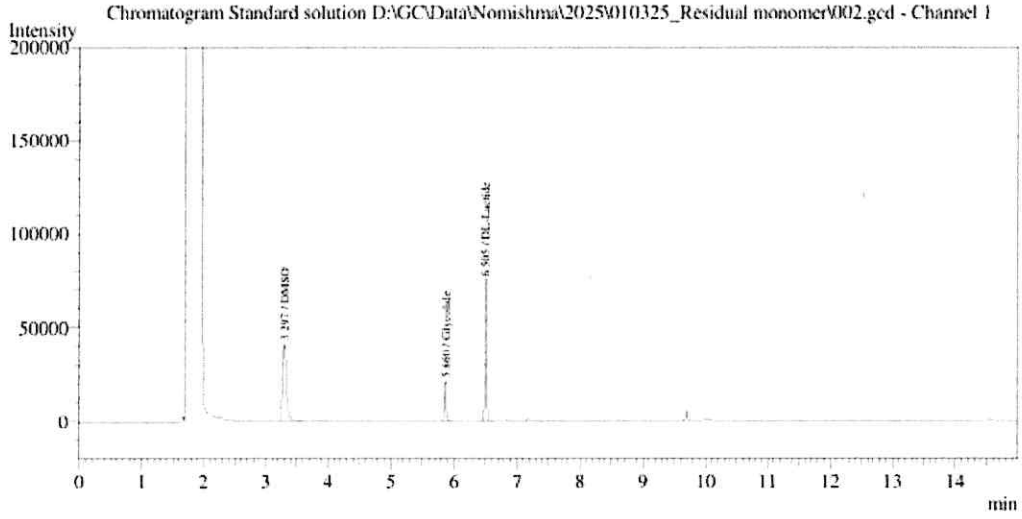
CHN/S Experimental Data:



Element	Name	Ret.Time	Area
Nitrogen	0.0000	69	74416
Carbon	47.7155	82	9924595
Hydrogen	4.7930	271	2528611
Totals	52.5085		12532290

Residual Monomer DL -Lactide & Glycolide and Residual Solvent DMSO by GC:

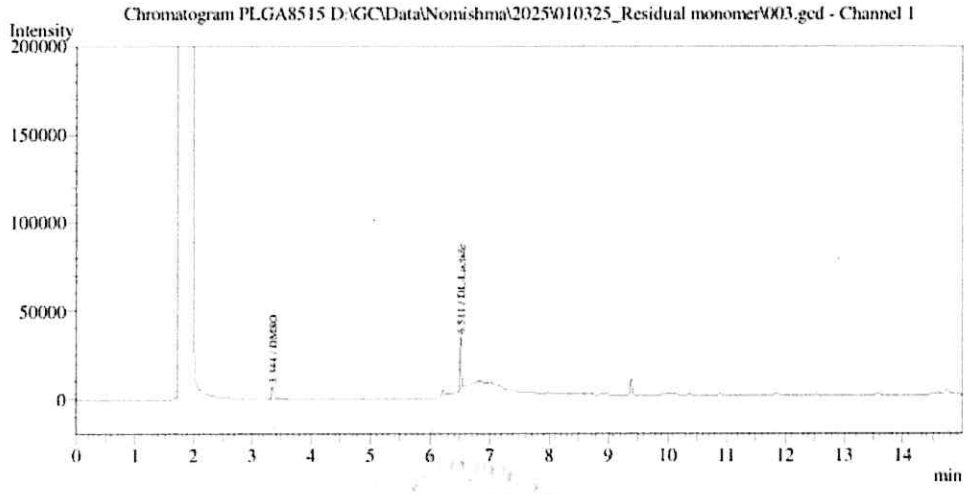
Standard Chromatograph:



Peak Table - Channel 1

Peak#	Name	Ret.Time	Area	Area%
1	DMSO	3.30	174904	48.70
2	Glycolide	5.86	44770	12.46
3	DL-Lactide	6.50	139503	38.84
Total			359177	100.00

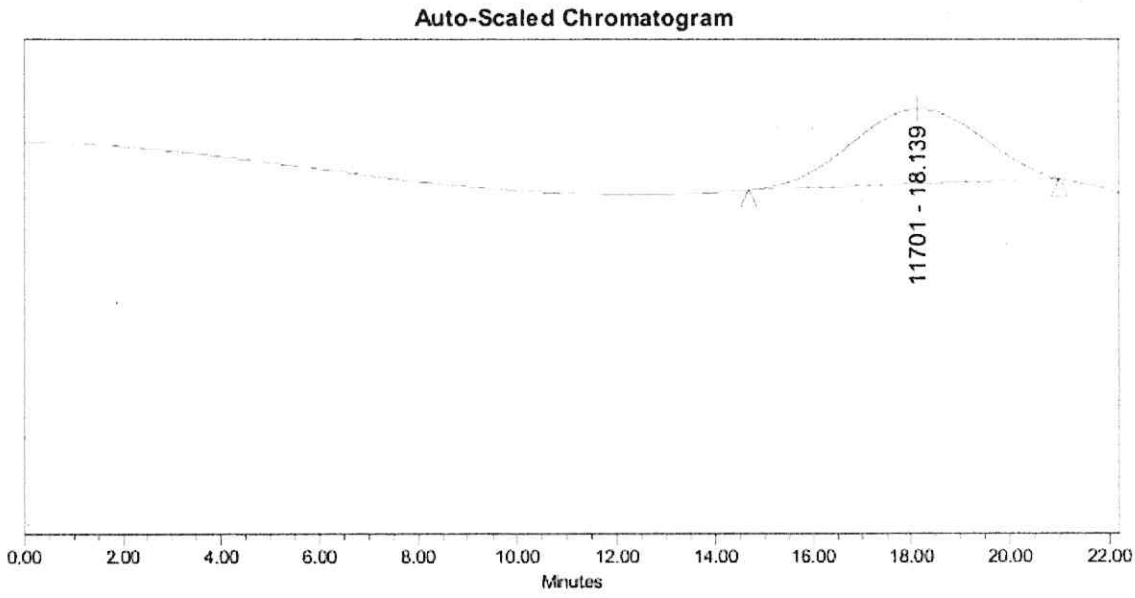
Sample Chromatograph:



Peak Table - Channel 1

Peak#	Name	Ret.Time	Area	Area%
1	DMSO	3.34	25669	32.38
2	DL-Lactide	6.51	53602	67.62
Total			79271	100.00

Molecular Weight (Mw) by GPC:



GPC Results

	Dist Name	Mn	Mw	MP	Mz	Mz+1	Mv	Polydispersity
1		9884	14012	11701	19242	24859		1.417612

Storage Conditions:

Storage condition are lot-specific and may change from one lot to another. Storage conditions on the label and/or the Product Information Sheet are valid for unopened container as received. When refrigerator (2 to 8°C) or freezer (at or below -10°C) storage condition is stated on the label, unless instructions are included in the label or the additional information section of this document, allow the unopened container to reach ambient temperature in a desiccator prior to opening. Once the container is opened, users are responsible for storing any remaining material according to their site procedures. If no specific directions or limitations are provided on the label and/or Product Information Sheet, the conditions of storage shall include storage at room temperature and protection from moisture, Light, freezing and excessive heat.

Quality Assurance

14.05.26