



# Recyclon<sup>®</sup>

Sustainable Alternatives to PA 66 and PA 6 using Recycled Content

## RECYCLON<sup>®</sup> RECYCLED POLYAMIDE SOLUTIONS

Recyclon polyamides contain up to 100% recycled resin, using post consumer recycled (PCR) or post industrial recycled (PIR) content.

### Recyclon<sup>®</sup> vs. Prime

≥ 80% Retention of Mechanical Properties

	Recyclon PA 66 33% Glass	Prime PA 66 33% Glass	% Property Retention
Tensile Strength at Break (MPa)	165	200	83%
Notched Izod Impact (KJ/m <sup>2</sup> )	8	10	80%

Portfolio includes standard products and specialty blends:

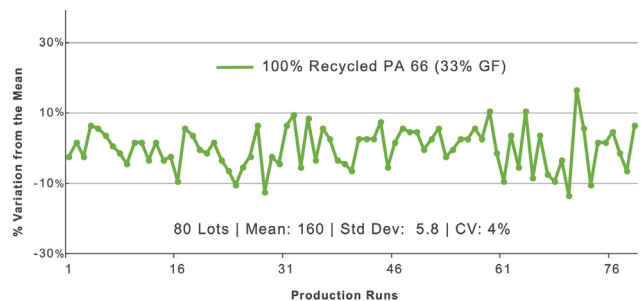
- Standard grades exhibit near-prime performance
- Specialty blends address the most demanding performance and aesthetic requirements while still meeting sustainability goals

### Recyclon<sup>®</sup> Product Consistency

Recyclon offers a high degree of consistency in performance and processability:

- Decades of polyamide formulation expertise
- Careful selection of high quality PCR and PIR resin feedstocks
- Robust production process with strong quality control checks

Lot to Lot Consistency: Minimal variation in tensile strength data from 80 production runs.



## Recyclon® AG Series Technical Data

GLASS REINFORCED PA 66 | WITH 50% PCR RESIN CONTENT

Property	Test Standard	Units	Recyclon AG13H	Recyclon AG33H	Recyclon AG43H
Material	ISO 1043	---	PA66-GF13	PA66-GF33	PA66-GF43
Density	ISO 1183	g/cm <sup>3</sup>	1.23	1.40	1.50
Tensile Strength at Break	ISO 527-1/-2	MPa	115	165	190
Tensile Elongation at Break	ISO 527-1/-2	%	3.8	3.0	3.2
Tensile Modulus (1 mm/min)	ISO 527-1/-2	MPa	5.6	11.5	14.1
Flexural Modulus	ISO 178	MPa	4.2	8.2	10.5
Notched Izod Impact at 23 ° C	ISO 180 (1A)	KJ/m <sup>2</sup>	4	8	10
Notched Izod Impact at -30 ° C	ISO 180 (1A)	KJ/m <sup>2</sup>	3	6	8
Notched Charpy Impact at 23 ° C	ISO 179	KJ/m <sup>2</sup>	3	7	9
Heat Deflection Temperature (1.8 MPa)	ISO 75	° C	213	228	225
Melting Point	ISO 11357	° C	255	255	255

## Recyclon® BG Series Technical Data

GLASS REINFORCED PA 6 | WITH 100% PCR RESIN CONTENT

Property	Test Standard	Units	Recyclon BG13H	Recyclon BG33H	Recyclon BG43H
Material	ISO 1043	---	PA6-GF13	PA6-GF33	PA6-GF43
Density	ISO 1183	g/cm <sup>3</sup>	1.20	1.38	1.49
Tensile Strength at Break	ISO 527-1/-2	MPa	90	145	160
Tensile Elongation at Break	ISO 527-1/-2	%	3.7	3.9	3.0
Tensile Modulus (1 mm/min)	ISO 527-1/-2	MPa	5.4	10.5	12.5
Flexural Modulus	ISO 178	MPa	4.5	8.0	10.5
Notched Izod Impact at 23 ° C	ISO 180 (1A)	KJ/m <sup>2</sup>	4	8	9
Notched Izod Impact at -30 ° C	ISO 180 (1A)	KJ/m <sup>2</sup>	3	6	8
Notched Charpy Impact at 23 ° C	ISO 179	KJ/m <sup>2</sup>	4	8	9
Heat Deflection Temperature (1.8 MPa)	ISO 75	° C	185	195	200
Melting Point	ISO 11357	° C	218	218	218

Contact Teknor Apex to begin customizing your solution today.

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