

# Makroblend® AR205 RE (PC+PET)

Covestro Deutschland AG

Partially bio-circular grade / Attributed via mass balance (according to ISCC PLUS Standard).

Rheological properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Melt volume-flow rate, MVR	38	cm³/10min	ISO 1133
Temperature	270	°C	-
Load	5	kg	-
Molding shrinkage, parallel	0.8	%	ISO 294-4, 2577
Molding shrinkage, normal	0.8	%	ISO 294-4, 2577

Mechanical Properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	2200	MPa	ISO 527
Yield stress	54	MPa	ISO 527
Yield strain	4.8	%	ISO 527
Nominal strain at break	>50	%	ISO 527
Stress at Break	48	MPa	ISO 527
Impact Strength (Charpy), +23°C	no break	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	no break	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	45	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	20	kJ/m²	ISO 179/1eA
Puncture - maximum force, +23°C	3900	N	ISO 6603-2
Puncture - maximum force, -30°C	5000	N	ISO 6603-2
Puncture energy, +23°C	42	J	ISO 6603-2
Puncture energy, -30°C	48	J	ISO 6603-2
Flexural Modulus (23°C)	2200	MPa	ISO 178
Flexural strength	80	MPa	ISO 178
Notched Impact Strength (Izod), 23°C	45	kJ/m²	ISO 180/1A
Notched Impact Strength (Izod)	20	kJ/m²	ISO 180/1A
Temperature	-30	°C	-
Impact Strength (Izod), 23°C	no break	kJ/m²	ISO 180/1U

Thermal Properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Temp. of deflection under load (1.80 MPa)	98	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	126	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	138	°C	ISO 306
Coeff. of Linear Therm. Expansion, parallel	81	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	82	E-6/K	ISO 11359-1/-2

Other Properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Density	1210	kg/m³	ISO 1183

Test specimen production	Value	Unit	Test Standard
<b>ISO Data</b>			
Injection Molding, melt temperature	270	°C	ISO 294
Injection Molding, mold temperature	70	°C	ISO 294
Injection Molding, injection velocity	200	mm/s	ISO 294

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	110	°C	-
Pre-drying - Time	2 - 4	h	-
Processing humidity	≤0.01	%	-
Melt temperature	260 - 280	°C	-
Mold temperature	60 - 80	°C	-
Zone 1	220 - 230	°C	-
Zone 2	240 - 250	°C	-
Zone 3	250 - 260	°C	-
Nozzle temperature	270 - 280	°C	-
Back pressure	5 - 10	MPa	-

**Characteristics**

**Processing**

Injection Molding

**Certifications**

Contains renewable resources, ISCC Plus

**Special Characteristics**

Impact modified

**Applications**

Automotive

**Disclaimer**

**Liability Exclusion**

These guide values are measured and provided by the product manufacturer and have been determined on standardised test specimens and can be affected by pigmentation, mould design and processing conditions. M-Base has taken the guide values from the producer's original Technical Data Sheet. **ALBIS AND M-BASE ARE THEREFORE NOT RESPONSIBLE FOR THE ACCURACY OF THE GUIDE VALUES AND CANNOT GIVE ANY WARRANTY WITH REGARD TO THEIR CORRECTNESS.**

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