

Technical Data Sheet

RW *Schulablend* M/MW NC100 GRY SF K2083

Acrylonitrile Styrene Acrylate + PA

Product Description

Nanocomposite based on ASA/PA-blend for high dimensional stability

Processing Method Injection Molding

Attribute Good Dimensional Stability

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (250 °C/5.0 kg)	6.0	cm ³ /10 min	ISO 1133
Density, (Method A)	1.18	g/cm ³	ISO 1183
Mechanical			
Tensile Stress at Yield			
(Type 1A, 50 mm/min)	51.0	MPa	ISO 527-2
(Type 1A, 50 mm/min) - Conditioned	34.0	MPa	ISO 527-2
Tensile Strain at Yield			
(Type 1A, 50 mm/min)	3.1	%	ISO 527-2
(Type 1A, 50 mm/min) - Conditioned	4.7	%	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	3100	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	1900	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	10	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	4.0	kJ/m ²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	19	kJ/m ²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	No Break		ISO 179
(-30 °C, Type 1, Edgewise)	75	kJ/m ²	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	No Break		ISO 179
Hardness			
Ball Indentation Hardness, (H 358/10)	101	MPa	ISO 2039-1
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	110	°C	ISO 306
(A (10N), 50 °C/h)	184	°C	ISO 306

Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	96.0 °C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	78.0 °C	ISO 75-2/A
Flammable		
Burning Rate, (2.00 mm)	30 mm/min	ISO 3795
Glow Wire Flammability Index		
(1.5 mm)	675 °C	IEC 60695-2-12
(3.0 mm)	675 °C	IEC 60695-2-12
Glow Wire Ignition Temperature		
(1.5 mm)	700 °C	IEC 60695-2-13
(3.0 mm)	700 °C	IEC 60695-2-13
UL Information		
Flammability Classification		
(1.5 mm)	HB	IEC 60695-11-10, -20
(3.0 mm)	HB	IEC 60695-11-10, -20