

NAS® XC

SMMA

INEOS Styrolution

NAS® XC is a styrene methyl methacrylate copolymer that can be used in a variety of applications demanding a low haze and extreme clarity.

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Melt Flow Index	1.6	g/10min	ASTM D 1238
Temperature	200	°C	-
Load	5	kg	-
Mold Shrinkage, MD	0.004	mm/mm	ASTM D 955
Density, 73°F	1110	kg/m³	ASTM D 792
Water Absorption, Equilibrium	0.17	%	ASTM D 570

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	24	cm³/10min	ISO 1133
Temperature	220	°C	-
Load	10	kg	-

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	3400	MPa	ISO 527
Stress at Break	65	MPa	ISO 527
Strain at Break	3	%	ISO 527
Impact Strength (Charpy), +23°C	20.5	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	1.4	kJ/m²	ISO 179/1eA
ASTM Data			
Tensile Modulus	3241	MPa	ASTM D 638
Flexural Modulus	3172	MPa	ASTM D 790
Flexural Strength	103	MPa	ASTM D 790
Rockwell Hardness	M 70	-	ASTM D 785

Thermal Properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load (1.80 MPa)	99	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	98	°C	ISO 306
ASTM Data			
Glass Transition Temperature	102	°C	ASTM E 1356
Vicat Temperature	105	°C	ASTM D 1525

Other Properties	Value	Unit	Test Standard
ISO Data			
Water Absorption	0.17	%	Sim. to ISO 62
Density	1110	kg/m³	ISO 1183

Film Properties	Value	Unit	Test Standard
ASTM Data			
Thickness of specimen	3	%	ASTM D 882

Optical Properties	Value	Unit	Test Standard
ASTM Data			
Haze	0.3	%	ASTM D 1003
Light Transmittance	93	%	ASTM D 1003
Index of Refraction	1.54	-	ASTM D 542

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	82	°C	-
Pre-drying - Time	2	h	-
Melt temperature	200 - 240	°C	-
Mold temperature	32 - 60	°C	-

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Characteristics

Processing

Injection Molding

Features

Light Guiding, Copolymer

Delivery form

Pellets

Applications

Electrical and Electronical

Special Characteristics

Transparent

Injection Molding

PREPROCESSING

Pre-drying, Temperature: 82°C

Pre-drying, Time: 2h

PROCESSING

Melt temperature, range: 200 - 240°C

Mold temperature, range: 32 - 60°C