

Product Texts

NAS® 90 is a styrene acrylic copolymer that can be used in a variety of applications demanding a strong, stiff water-clear plastic resin with excellent thermal stability. Food contact statements are available on request.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Melt volume-flow rate, MVR	16	cm ³ /10min	ISO 1133
Temperature	220	°C	-
Load	10	kg	-
Melt flow index, MFI	5	g/10min	ISO 1133
Temperature	200	°C	-
Load	5	kg	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	3100	MPa	ISO 527
^[C] Stress at break	60	MPa	ISO 527
^[C] Strain at break	2.3	%	ISO 527
^[C] Charpy impact strength, +23°C	13	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	1.5	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
^[C] Temp. of deflection under load, 1.80 MPa	75	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	83	°C	ISO 75-1/-2
^[C] Vicat softening temperature, B	90	°C	ISO 306

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Humidity absorption	0.1	%	Sim. to ISO 62
^[C] Density	1070	kg/m ³	ISO 1183

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2	h	-
Melt temperature	200 - 240	°C	-
Mold temperature	30 - 60	°C	-

Characteristics

Processing

Injection Molding

Delivery form

Pellets

Special Characteristics

Transparent, Sterilizable, Ethylene Oxide (EtO) Sterilization, Gamma irradiation sterilization

Features

Blending Resin, Copolymer

Chemical Resistance

Radiation Resistance

Certifications

Food contact, Food approval 10/2011, Food approval FDA 21 CFR, Medical Grade, Biocompatibility ISO 10993, US Pharmacopeia Class VI Approved, Drug Master File, Long term supply assurance

Applications

Medical

Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa

Other text information**Injection molding**

PREPROCESSING

Pre-drying, Temperature: 80°C

Pre-drying, Time: 2h

PROCESSING

Melt temperature, range: 200 - 240°C

Mold temperature, range: 30 - 50°C