

PRODUCT INFORMATION

NILSAN A GP

ASA standard grade for general purpose applications, good flow and gloss.

ISO short Form ISO 1043: ASA Pellets

Key Features

- Good weathering resistance
- Good impact - stiffness balance
- Designed for injection moulding applications
- Good flowability

Availability

- AT: antistatic
- LP: laser printable
- L: UV stabilized
- H: heat stabilized
- All colours

Process

- INJECTION MOULDING

Application

- Power tools
- Household
- Furniture
- Electronic
- Electrical
- Consumer
- Building
- Automotive

Property	Method	Unit	Value	Condition	State
ELECTRICAL					
Tracking Resistance (CTI - Method A)	IEC 60112	Volt	>600		
PHYSICAL					
Density (+23°C)	ISO 1183	g/cm ³	1,07		
Water Absorption (24h / +23°C)	ISO 62	%	0,45		
Water Absorption at Saturation	ISO 62	%	1,65		
Mould Shrinkage (Parallel)	Internal method	%	0,4 - 0,7	23°C - 3,2 mm	

PRODUCT INFORMATION

NILSAN A GP

Mould Shrinkage (Normal)	Internal method	%	0,4 - 0,7	23°C - 3,2 mm
Melt Flow Rate (MFR)	ISO 1133	g/10 min	20	220°C - 10 kg

MECHANICAL

Tensile Modulus	ISO 527-1,2	MPa	2400	Speed 1 mm/min
Elongation at Yield	ISO 527-1,2	%	3,3	Speed 50 mm/min
Tensile Yield Strength	ISO 527-1,2	MPa	51	Speed 50 mm/min
Flexural Modulus	ISO 178	MPa	2500	Speed 1 mm/min
Flexural Max Strength	ISO 178	MPa	75	Speed 10 mm/min
IZOD Notched Impact (+23°C)	ASTM D256	J/m	110	

THERMAL

Softening Temperature - 5 kg (VST/B/50)	ISO 306	°C	97	50°C/h
Deflection Temperature 1,80 MPa (HDT A)	ISO 75A	°C	96	120°C/h
Ball Pressure Test	IEC 60695-10-2	°C	75	
Continuous service temperature (short term)	UL746 B	°C	85	
Coefficient of linear thermal expansion (parallel)	ISO 11359-1,-2	K ⁻¹	8x10E(-5)	

FLAMMABILITY

Flame Behaviour (1,6 mm)	UL94	Class	HB	
Flame Behaviour (3,2 mm)	UL94	Class	HB	
Glow Wire Flammability Index-GWFI (2 mm)	IEC 60695-2-12	°C	650	

INJECTION MOULDING

	Value
Drying Temperature (Circulating Air Oven)	70 - 80 °C
Drying Temperature (Desiccant Dryer)	70 - 80 °C
Drying Time (Circulating Air Oven)	2 - 4 h
Drying Time (Desiccant Dryer)	1 - 2 h
Suggested Max Regrind	< 15%
Melt Temperature	230 - 270 °C
Feed Temperature	190 °C
Rear Temperature	220 °C



PRODUCT INFORMATION

NILSAN A GP

Middle Temperature	230°C
Front Temperature	240°C
Nozzle Temperature	250°C
Mould Temperature	50 - 80°C
Injection Rate	Medium to fast
Back Pressure	0,2 - 0,5 Mpa
Screw Revolving Speed	As low as possible
Cushion	3 - 6 mm
Screw Compression Ratio	2:1 - 3:1

Notes During processing, a dehumidifying hopper dryer is recommended at a temperature of 60 to 80°C.