ASEC



ENGINEERING PLASTICS PA AE-ZL1100

SKU: AEZL1100

ASEC Kunststoffen BV

Marketing 17, 6921 RE Duiven, The Netherlands

T: +31 316 84 44 01 | info@asec.nl

Categories: PA, PA6G Cast

Features

- Extreme wear resistant under harsh conditions.
- Heavy duty material.
- High impact resistant.
- High chemical resistant.
- Exceptional machineability.
- Color natural.

Application
Construction material for mechanical applications with high load and long life.

Material
Cast nylon polyamide 6

AEZL1100 is a cast polyamide 6 heavy duty, high iMPact , and chemical resistant material for bigger parts. It has high wear resistance at low and middle speeds and performs especially well under harsh conditions such as contact with sand or dust. Due to its balanced mechanical properties and its exceptional machinability it is the ideal engineering material for a wide range of applications.

The information in this datasheet is provided for general purposes only and not meant to be a specific recommendation for any individual application. All values were determined under laboratory conditions. ASEC Products is not directly neither indirectly responsible for any claim resulting from the use of any information provided in this datasheet.
ASEC Products 2022 ©.

ASEC

Availablity		Value	Unit
Rod diameters		30-800	mm
Tube inside diameter		30-840	mm
Tube outside diameter		50-880	mm
Length standard		1000/2000	mm
Sheet size		1000-1220/1000-3050	mm
Sheet thickness		8-165	mm
Physical properties	**Test standard**	**Value**	**Unit**
Density		1.15	g/cm³
Food contact allowed		Low	
Wear Resistance		High	
Dimensional stability		Medium	
Mechanical properties	**Test standard**	**Value**	**Unit**
Yield stress	ISO 527	80	MPa
Elongation at break	ISO 527	40	%
Modulus of elasticity in tension	ISO 527	3100	MPa
Bending modulus	Flexural test / ISO178	3400	MPa
Flexural strength	ISO 178	140	MPa
Charpy impact strength +23°C	ISO 179/1eU	no break	kJ/m²
Charpy notched impact strength +23°C	ISO/1eA	>4	kJ/m²
Ball indentation hardness	ISO 2039	160	N/mm²
Thermal properties	**Test standard**	**Value**	**Unit**
Min. working temperature		-40	°C
Max. working temperature		105	°C
Inter. working temperature		170	°C
Melting temperature	ISO 3146	220	°C
Thermal coefficient of linear expansion	DIN 53752	7-8	1/K.10-5
Thermal conductivity		0.23	W/m°K
Specific heat capacity	IEC 1006	1.7	J/g.K
Moisture absorption at 23°C. 50% RH	ISO 62	2.2	%
Water absorption at 23 °C	ISO 62	6.5	%
Flammability	UL 94	HB	[-]
Friction properties	**Test standard**	**Value**	**Unit**
Coefficient of friction		High	
Coefficient of friction dynamic	No lubrication	0.30-0.35	[-]
Electrical properties	**Test standard**	**Value**	**Unit**
Dielectric constant	DIN 53483	3.7	[-]
Dielectric loss factor	DIN 53483	0.03	[-]
Dielectric strength	IEC 243	50	KV/mm
Dielectric constant at 1MHZ	IEC 250	3.7	[-]
Volume resistivity	IEC 93	10 15	Ω.cm
Surface resistivity	IEC 93	10 13	Ω
Resistance to tracking (CTI)	DIN EN 60112	600	[-]

The information in this datasheet is provided for general purposes only and not meant to be a specific recommendation for any individual application. All values were determined under laboratory conditions. ASEC Products is not directly neither indirectly responsible for any claim resulting from the use of any information provided in this datasheet.
ASEC Products 2022 ©.