

## Datasheet AE202SW



AS202 has a high resistance to abrasion and impact, a good example as a substitution material for bronze, aluminum and other non-ferrous metals. It has also significant weight advantages. AS202 reduces lubrication requirements and is non-abrasive to mating surfaces. AS202 is good for general purpose wear and structural parts which need a good balance of strength and toughness. AS202 is approved for contact with food.

## Application

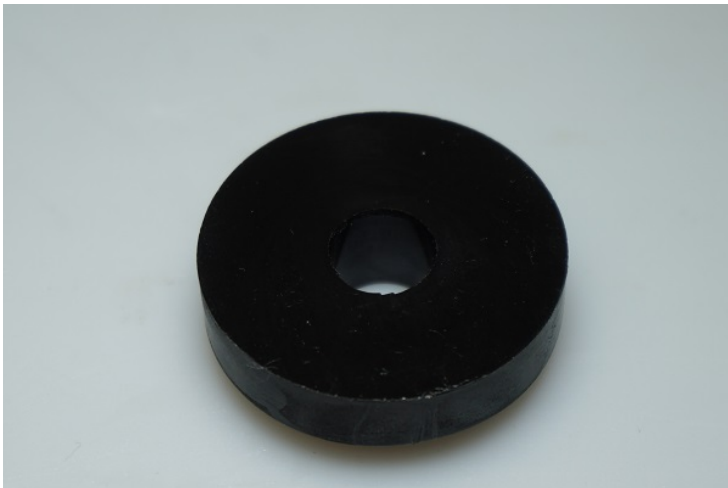
Pulp and paper industry, offshore and marine, textile, general machine building, food industry, material handling, electronics, construction, mining, aerospace and many more.

## Material

Polyamide.

## Availability

	Value	Unit
Rod diameters	6-200	mm
Tube inside diameter	on request	mm
Tube outside diameter	on request	mm
Length standard	on request	mm
Sheet thickness	2-100	mm
Sheet size	on request	mm



## AE202SW - Specifications

### Physical properties

	Test standard	Value	Unit
Density		1,13	g/cm <sup>3</sup>
Thermal conductivity	Method A	0,33	W/m <sup>°K</sup>
Specific heat capacity	IEC 1006	1,7	J/g.K
Moisture absorption at 23°C, 50% RH	ISO 62	3	%
Water absorption at 23 °C	ISO 62	9	%
Flammability	UL 94	HB	[-]

### Mechanical properties

	Test standard	Value	Unit
Tensile strength	ISO 527	80	MPa
Hardness	ISO 868	82	SHORE-D
Yield stress	ISO 527	79	MPa
Elongation at break	ISO 527	70	%
Modulus of elasticity in tension	ISO 527	3200	MPa
Bending modulus	ISO 178	3000	MPa
Flexural strength	ISO 178	110	MPa
Charpy impact strength +23°C	ISO 179/1eU	no break	kJ/m <sup>2</sup>
Charpy notched impact strength +23°C	ISO/1eA	6,4	kJ/m <sup>2</sup>
Ball indentation hardness	ISO 2039-1	172	N/mm <sup>2</sup>
Compressive modulus	ISO 604	2400	MPa

### Thermal properties

	Test standard	Value	Unit
Min. working temperature		-40	°C
Max. working temperature		100	°C
Intermittent working temperature		170	°C
Heat distortion temperature	Method A ISO 75	70	°C
Melting temperature	ISO 3146	220	°C
Thermal coefficient of linear expansion	DIN 53752	07-10	1/K.10-5

### Friction properties

	Test standard	Value	Unit
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### Electrical properties

	Test standard	Value	Unit
Dielectric constant		on request	
Dielectric loss factor		on request	
Dielectric strength	IEC 243	25	KV/mm
Dielectric constant at 1MHZ	IEC 250	3,5	[-]

## Electrical properties

Volume resistivity	IEC 93	$10^{13}$	$\Omega \cdot \text{cm}$
Surface resistivity	IEC 93	$10^{13}$	$\Omega$
Resistance to tracking (CTI)		on request	

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