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with a personal touch

## TECHNICAL DATASHEET NESTAAN® POLYURETHANE SYSTEMS



### NESTAAN® PN013/110

<b>Components</b>	A-Component: NESTAAN® POLY PN013/110 B-Component: NESTAAN® ISO 30
<b>Material description</b>	Waterblown 2 component PU pour foam system.
<b>Application</b>	NESTAAN® PN013/110 is a water blown two component PUR pour system with low odor.
<b>Application areas</b>	High density moulded pieces such as pipe sections, wood imitation, decorative- and technical parts.

Product properties			
	A-Component	B-Component	Unit
Appearance	Yellowish liquid	Dark brown liquid	
Specific mass 20°C	1060 – 1080	1210 – 1250	g/l
Viscosity 20°C	1000 – 1200	150 - 250	mPa.s
<b>Mixing ratio</b>			
Parts by weight	100	115	
Parts by volume	100	100	

Typical foaming properties (handmix, 20°C, 3000 rpm)			
		Value	Unit
<b>Reactivity</b>	Cream time (CT)	30 ± 3	s
	Gel time (GT)	100 ± 10	s
<b>Density</b>	Core density	110 ± 11	kg/m <sup>3</sup>

Packaging	
<b>NESTAAN® POLY PN013/110 can be supplied in</b>	
Plastic cans	25 kg nett
Metal drums	50 or 210 kg nett
IBC's	1050 kg nett
Bulk	21000 kg nett
<b>NESTAAN® ISO 30 can be supplied in</b>	
Plastic cans	30 kg nett
Metal drums	60 or 250 kg nett
IBC's	1250 kg nett
Bulk	23000 kg

Shelf life and storage			
	A-Component	B-Component	Unit
Storage temperature	10 - 25	5 - 30	°C
Shelf life (in closed, sealed packaging)	3	6	months



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### Processing

NESTAAN® PN013/110 can be used for all kinds of applications where an excellent flow is demanded. The system shows a good adhesion to most common facing materials, but the temperature of all parts in contact with the reacting foam should be at least 25°C to prevent delaminating of the foam. Some facing materials, like aluminum or stainless steel, should be grinded or treated with a suitable primer first. In case of doubt the adhesion should be tested in advance.

Typical demould times, depending on equipment and temperatures, are approximately 3 minutes per cm thickness, this should be confirmed by production trials. When large volumes have to be filled, extra attention should be paid to the exothermic reaction, which occurs in all polyurethane foam reactions. Sufficient cooling period should be introduced before applying the next batch.

Operating temperatures for applied material: -50°C to +90°C.

### Typical foam properties

	Value	Unit	Method
<b>Applied density</b>	150 – 200	kg/m <sup>3</sup>	EN 1602
<b>Compressive strength</b>	> 1000	kPa	EN 826
<b>Water absorption</b>	< 2	kg/m <sup>2</sup>	EN 1609
<b>Thermal conductivity</b>	< 0,035	W/m.K	EN 12667
<b>Closed cell content</b>	> 90	%	ISO 4590
<b>Dimensional stability</b> -20°C +70°C/90% RH	<2 / <0,5 <5 / <1	%	EN 1604
<b>Fire behavior</b>	B3 < 125 F	-- mm --	DIN4102,t.1 ISO 3582 EN 13501

### Remarks

Our recommendations with regard to technical applications, whether verbal, written or through means of testing, are provided to the best of our knowledge. However, they only count as non-committal guidelines, also applicable to the possible protective rights of third parties. They do not dismiss you of the obligation to check the products supplied by us on their suitability for the intended applications or purposes.

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