Quality insulation
with a personal touch

TECHNICAL DATASHEET
NESTAAN® POLYURETHANE SYSTEMS

NESTAAN® PN013/110-HM

Components	A-Component: NESTAAN® POLY PN013/110-HM B-Component: NESTAAN® ISO 30
Material description	Waterblown 2 component PU pour foam system.
Application	NESTAAN® PN013/110-HM is a water blown two component PUR pour system with low odor, suitable for hand-mix operation, because of the delayed reactivity.
Application areas	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
Mixing ratio Parts by weight Parts by volume	 100 100	 115 100	

Typical foaming properties (handmix, 20°C, 3000 rpm)			
		Value	**Unit**
Reactivity	Cream time (CT) Gel time (GT) Tack Free Time (TFT)	60 ± 6 200 ± 20 250 ± 25	s s s
Density	Core density	110 ± 11	kg/m³

Packaging	
NESTAAN® POLY PN013/110-HM can be supplied in	
Plastic cans	25 kg nett
Metal drums	50 or 210 kg nett
IBC's	1050 kg nett
Bulk	21000 kg nett
NESTAAN® ISO 30 can be supplied in	
Plastic cans	30 kg nett
Metal drums	60 of 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

Due to the balanced reactivity of NESTAAN PN013/110-HM, it is suitable to produce high quality polyurethane foams with the use of basic tools. The start of the reaction (cream time) is delayed, while the other reactions are like other standard system for mechanical processing, so the total processing time remains equal.
The reactivity of all polyurethane systems strongly depends on ambient and material temperature, slower reaction times at low temperatures, faster reaction times at high temperatures. The ideal processing temperature on this system is 20°C. So it is necessary to place the materials at room temperature several hours before processing.
Just before processing, weigh out both components in the right mixing ratio and mix intensively during appr. 10-15 sec. with a high speed drill (3000 rpm) using a propeller mixer (Master Speed Mixer, Ø = 55 mm.). Properly mixed material is free of stripes and has a uniform cream-like colour. After pouring in the desired mould, never scrape material from the wall of the mixing cup, this is not mixed well and results in poor foam.
After processing used material can be cleaned using an appropriate solvent
(e.g. NESOL X).

Typical foam properties

	Value	Unit	Method
Applied density	100 – 150	kg/m³	EN 1602
Compressive strength	> 1000	kPa	EN 826
Water absorption	< 2	kg/m²	EN 1609
Thermal conductivity	< 0,045	W/m.K	EN 12667
Closed cell content	> 90	%	ISO 4590
Dimensional stability -20°C +70°C/90% RH	 <2 / <0,5 <4 / <1	 %	 EN 1604
Fire behavior	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.

Application, usage and processing of the products happen outside of our control possibilities and therefore are your own responsibility. Nestaan does not accept any liability for damage caused by the application of our products (damage by third parties and possible consequential damages included). In case a court should conclude liability, the damage of all claims is limited only to the value of the goods that we supplied to you in relation to the damage causing project.

The above according to mentioned criteria in our general sales and delivery terms.

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