



Quality insulation  
with a personal touch

## TECHNICAL DATASHEET NESTAAN® POLYURETHANE FOAMS

### NESTAAN® PIR40C5

<b>Appearance</b>	Yellowish or greenish rigid foam.
<b>Availability</b>	Nestaan® PIR (polyisocyanurate) foam is available as block, sheets/slabs or in pre cutted shape such as pipe sections and various profiles. The standard maximal width for blocks and slabs is 125 cm. The length can be ordered up to 4 meter. Other dimensions on request.
<b>Application</b>	General high performance insulation material to be used as core material for sandwich panels, industrial insulation such as tanks, pipes, vessels, ships, cold rooms, refrigerated trucks etc.

	Value	Unit	Method	EN13165
<b>Density</b>	37 - 43	kg/m <sup>3</sup>	EN 1602	
<b>Thermal conductivity 10°C (λi)</b>	0,020-0,023	W/m.K	EN12667	
Initial thermal conductivity 10°C (λ <sub>90/90</sub> )	0,022		EN13165	
Aged, diffusion open facings (d <80 mm)	0,028		EN13165	
Aged, diffusion open facings (d 80-120 mm)	0,027		EN13165	
Aged, diffusion open facings (d >120 mm)	0,026		EN13165	
Aged, diffusion tight facings	0,024		EN13165	
<b>Compressive strength</b>	> 225	kPa	EN826	<b>CS(Y)225</b>
E-Modulus	> 6500	kPa		
<b>Tensile strength</b>	> 250	kPa	EN1607	<b>TR150</b>
E-Modulus	> 8000	kPa		
<b>Bending strength</b>	> 400	kPa	EN12089	
E-Modulus	> 6000	kPa		
<b>Closed cell content</b>	> 90	%	ISO 4590	
<b>Dimensional stability</b>			EN1604	
70°C/90% RV, 48 h. - length+width /thickness	<1 / <1,5	%		<b>DS(70,90)3</b>
-20°C, 48 h. - length+width /thickness	<0,5 / <0,5	%		<b>DS(-20,-)2</b>
Deformation (168 h.) under 40 kPa load at 70°C	<1,5	%		<b>DLT(2)5</b>
<b>Fire behaviour</b>			EN13501-1 DIN4102-1	<b>E</b>
European SBI class	E			
German classification	B2			
<b>Water absorption</b>	< 2	Vol-%	EN12087	
<b>Linear expansion coefficient</b>	50-70 . 10 <sup>-6</sup>	m/m.K		
<b>Service temperature</b>	-120 / +120	°C		
<b>Toleration on thickness</b>				<b>T3</b>



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.

0240-UK/201406-1