


thermoset high-performance insulating material

application	with particularly high thermal insulation performance for construction of refrigerated and commercial vehicles	
assembly	unlaminated blocks, boards or pre-cut parts dimensions at customer's option upon request dimensional tolerances acc. to puren factory standard	

Cargodur® 35		Technical data PU rigid foam		
Characteristic	Standard/test procedure	Unit	Indicator	
Material	Polyurethane rigid foam (PU) in compliance with EN 13165 and EN 14308, harmless from a biological and building ecology point of view, recyclable, rotproof, resistant to mildew and decay.			
Bulk density	EN 1602	kg/m ³	34 - 36	
Thermal conductivity	Fresh values ²⁾		W/(m·K)	0,020 - 0,022
Compressive strength				measured values ²⁾
Compressive stress at 10% compression	EN 826	kPa	210 - 250	
E-modulus (compressive stress) ²⁾		MPa	4,5 - 7,5	
Tensile strength perpendicular to panel plane				
Transverse tensile strength		kPa	330 - 390	
E-modulus (transverse tensile stress) ²⁾	EN 1607	MPa	9,0 - 12,0	
Bending strength ²⁾	EN 12089	kPa	280 - 360	
Transverse strength ²⁾	EN 12090 (in compliance with DIN 53427)	kPa	160 - 210	
Shear strength ²⁾	EN 12090 (in compliance with DIN 53294)	kPa	180 - 240	
Fire behaviour	non-smouldering, non-melting, non-dripping			
Reaction to Fire Class / RtF (EU)	EN 13501-1		F	
Closed cell content ²⁾	ISO 4590	%	90 - 95	
Temperature resistance		°C	-30 to +120	
Moisture absorption ²⁾	EN 12087	Vol.-%	≤ 3	
Specific heat capacity ¹⁾	C	EN 12524	J/(kg·K)	1400
Water vapour diffusion resistance factor ¹⁾	μ	EN 12086		40 - 200
Linear expansion coefficient ¹⁾		EN 1604	1/K	5 - 8 · 10 ⁻⁵
1) Literature value, not part of the factory production control and external supervision. 2) Average values calculated on a regular basis under production conditions as part of factory production control. It is ensured that mechanical characteristic values do not fall below their minimum level by more than 10%..				