

## Polyisocyanurate Foam (PIR)



**Shreeinsul PIR** CFC and HCFC free rigid insulation foam products having operating temperature range from -200°C to +150°C. **Shreeinsul PIR** foams are available in slab, pipe section and a choice of profiles & blocks. These are prefabricated using CNC machines from Free rise buns made in discontinuous process. These foams are special purpose high strength insulating material adequate for low temperature installations as in LNG/LPG Pipelines & Equipments.

### Features

- Durable
- Pre-Fabricated and ready to use
- Fire retardant
- Available in Butt & Shiplap Joints
- Sawing and Shaping not required at site
- Available in various density and dimensions as per customer requirement
- Excellent Thermal conductivity

### Properties

Property	Criteria	Standard
<b>TEST RESULTS CONFIRMS ASTM C 591</b>		
<b>Density</b>	Min 40 kg/m <sup>3</sup>	ASTM D1622
<b>Closed Cell Content</b>	Min 95%	ASTM D6226
<b>Water Vapour Transmission</b>	Max 0.8 g/h-m <sup>2</sup>	ASTM E96
<b>Dimensional stability</b>	Max 4% (70 + 2°C), 97 + 3 % RH	ASTM D 2126
	Max 1% (-40 + 3°C), ambient RH	
	Max 2% (100 + 2°C), ambient RH	
<b>Flame Spread Index</b>	25 max	ASTM E84
<b>Coefficient if the Thermal Expansion and contraction</b>	50-100x10 <sup>-6</sup> mm/°C	ASTM D696
<b>Compressive strength at 10% deformation</b>	Min 240 kPa	ASTM D1621
<b>Tensile Strength</b>	Min 265 kPa	ASTM D1623
<b>Leachable chloride content</b>	<60 ppm	ASTM C871
<b>Thermal Conductivity @ different mean temperatures</b>		
<b>At -120°C</b>	Max 0.019 w/m.k	ASTM C177
<b>At -80°C</b>	Max 0.025 w/m.k	
<b>At -20°C</b>	Max 0.26 w/m.k	
<b>At +10°C</b>	Max 0.025 w/m.k	
<b>Cryogenic Thermal Stress Ratio (CTSR)</b>	>1.5	