

BehCross1600

- Cross-Linkable Polyethylene

Product Description

BehCross1600 is a white silane-grafted compound, Curable by exposure to moisture conditions, circulation of hot water, or being at ambient. BehCross1600 is used with BehLink2200 (as a catalyst masterbatch) in a ratio of 95:5 for the outer layer of Hot and cold drinking water pipe, floor heating, Radiator connection, and Al composite pipe.

The highly cross-linked materials produced by the two-component system show excellent impact strength, ESCR, creep, and internal pressure resistance under ambient and elevated temperature conditions.

BehCross1600 was designed for the requirement in ASTM F1281 for hot and cold water pressure multilayer PEX-AL-PEX pipes.

Properties			
Typical Properties	Test Method	Unit	Value
Physical			
Density	ISO 1183	g/cm ³	0.945
Melt Flow Index (190°C, 5kg)	ISO 1133	g/10min	4.5±1
Gel Content	ASTM D2765-01	%	>65
Mechanical			
Tensile Strength at Yield (50mm/min)	ISO 527	MPa	20±1
Tensile Strength at Break (50mm/min)	ISO 527	MPa	25±1
Tensile Strain at Break (50mm/min)	ISO 527	%	≥600
Thermal			
Vicat Softening Point	ISO 306	°C	122

Technical Data Sheet

Processing Conditions

As a guide, the following temperature profile and other condition is recommended.

Single Screw Extruder (Conventional PE Screw, Screw L/D: 24-30)

The actual extrusion conditions depend on the screw, die design, pipe diameter, wall thickness, and throughput rate.

Hopper Zone	Cylinder (Barrel)	Head/Die Zone
Cooled	180-230 °C	210-230 °C

Shelf Life & Storage

Shelf life at proper storage is at least 6 months from the production date, but in case of a long storage time, potential moisture pick-up needs to be eliminated by drying before injection. Sacks should be stored in dry/closed condition and protected from sunlight.

Note

This documentation is made based on our tests and experiments in our R&D center with piled-up experience and knowledge. The values are measured on injection molded test specimens. It is suggested that the information contained in this document can be used for general indication. Therefore, you should not construe it as product specifications, and you should do appropriate tests before you consider your conditions for new applications.