



## Kimcross 1450 / 1334

Cross-linkable Polyethylene

### Product Description

Kimcross1450 is a silane grafted MDPE compound, curable by exposure to moist conditions, circulation of hot water or being at ambient. And shows good extrusion properties at high output rates. Kimcross 1450 is used with Kimcross 1334 (a catalyst masterbatch) in the ratio of 95:5.

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.

Kimcross1450 is designed for the requirements in ASTM F1281 for hot and cold water pressure multilayer PEX-AL-PEX pipes in inner layer.

### General

Features	• Natural/High Purity	• Cross-linkable	• Good Process ability
Uses	• High temperature pressure pipe	• Multilayer pipe	• Inner layer
Appearance	• Natural		
Forms	• Pellets		
Packaging	• 25 Kg moisture resistance sack		
Processing Method	• Extrusion		

Physical	NominalValue	Unit	TestMethod
Density	0.945	g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/5 kg)	4±1	g/10 min	ISO 1133
Gel content	>65	%	ASTM D2765-01

Mechanical Properties	NominalValue	Unit	TestMethod
Tensile Stress (Yield)	20±1	MPa	ISO 527
Tensile Strain (Break)	> 600	%	ISO 527

Thermal	NominalValue	Unit	TestMethod
Vicat Softening Point	122	°C	ISO 306

### Extrusion

As a guide the following temperature profile is recommended

Zone 1	Zone 2	Zone 3	Zone 4	Head	Die
140	160	180	190	200	210

### Crosslinking

The final pipe properties are curing dependent. Curing can be done in the following ways:

- By immersion in hot water at 85-95°C.
- By circulation of hot water inside the pipe at 85-95°C.
- By exposure to low pressure steam.
- Ambient curing.

In all cases curing time depends on the pipe wall thickness, pipe structure, applied curing temperature and ambient moisture (for ambient curing).

### Note

- Test results have been achieved with a ratio of 95 to 5. Change this ratio gives different results and sometimes outside of the standard
- Test results have been achieved with laboratory equipment. Change the test machine may give different results and sometimes outside of the standard
- The specifications given are the guidelines only.
- Above compound is suitable to run on different machines; however some adjustments may be required on individual machine.
- The customers are advised to check the quality, prior to commercial use. There is no guarantee and/or warrantee what so ever, after processing