

ZARLNKTM XL4001

PEX compound for Pipe – PEX-B Silane crosslinkable

• Description

ZARLNKTM XL4001 is a cross linkable natural polyethylene compound based on Supercure technology and a one-part Silane cross linkable insulation system, specially designed for PEX Pipe applications.

Polyethylene is used to manufactured compounds using the SILOXAN one-component system, a Silane crosslinking system developed by KABELMETAL ELECTRO GmbH. This process utilizes a special system that allows the additives and Silane to be homogeneously compounded with polyethylene pellets. Curing of the finished product is done in the presence of moisture.

Applications

ZARLNKTM XL4001 is intended for is used for the production of fittings for domestic hot and cold water supply for both monolayer and all plastic multilayer pipe solutions

Physical Properties

Data should not be used for specification work

Property	Typical Value	Test Method
Density (Base Resin)	0.95 gr/cm3	ISO 1183
Melt Flow Rate (190'C, 2.16 kg)	2 ~ 3 gr/10 min	ISO 1133
Elongation at Break (250 mm/min)	>300 %	IEC 60811-401
Tensile Strength (250 mm/min)	14 N/mm2	IEC 60811-401
Hot set test (200°C, 20N/cm2) Elongation under load	60 %	IEC 60811-507
Gel content	Min 65 %	ASTM D2765
Water content	< 0.1 %	ISO 15512
Hardness, Shore D(1s)	50	ISO 868

Crosslinking

- by immersion in hot water at 60-95°C
- by circulation in hot water inside the pipe at 60-95°C
- by exposure to steam
- by exposure in ambient, crosslinking time depends on ambient temperature and relative humidity
- in all cases curing time depends on the thickness; for pipes 18*2 mm 4-6 hours in immersed hot water at 95°C are generally necessary.





ZARLNKTM XL4001

Technical Datasheet

PEX compound for Pipe - PEX-B Silane crosslinkable

* Processing conditions and precaution

- (1) Extrusion Equipment
- (a) L/D ratio 20/1-26/1. PVC or PE extruders are suitable with 2-2.7 compression ratio.
- (b) For tube extrusion, the recommended Draw Down ratio is<1.5:1.
- (c) Screen mesh: at most 40/60; Stainless steel screen is recommended.
- (d) Cooling water temperature to be $> 30^{\circ}$ C.

2) Typical temperature Setting °C

Feed	Compression	Metering	Neck	Die Head	Die
150-160	160 - 170	170 - 190	200	210	220

DO NOT LEAVE THE MELT IN THE EXTRUDER FOR MORE THAT 20 MINS!

Packaging

Package: Aluminum bags (25 kg)

Small Bins (550 kg)

Storage

ZARLNKTM XL4001 has a shelf life of 12 months from delivery date if stored in unopened original packages, under dry and clean conditions at temperatures between 10 - 30 °C.

Before use, material shall be conditioned indoors (production room) to reach ambient temperature. It is also recommended to ensure proper stock rotation by First In – First Out principle. Avoid direct exposure to sunlight and weathering

