



## ALLINONE insulating pipe Introduction

SUNTY-ECO ALLINONE insulating pipe is integrated with water delivery, heat-insulating and protection functions, it is specially used in water heating fields, such as solar water heater, solar water heating project and air source heat pump, center air-conditioning system and other HVAC systems.

1. The inner pipe is made of PEX cross linked polyethylene pipes (PPR AND PAP are also optional), it could bear the temperature from -40°C to +110°C, the PEX material is also strong and toughness, it could bear the pressure of 1.25Mpa. It's also light in weight, no water scale and long lifespan, so PEX pipe is widely used in water pipe system now.

2. The insulating layer use Closed cell high density polyethylene foam material, it has the features of tightly fitting, non-shedding, no crack and UV resistant. The pipe would help to saving time during installation, it greatly reduce the installation cost and after sales service cost of dealers.

3. The outer pipe jacket is made of high quality EVA material which is the same as 10KW high voltage cable jacket, it has the feature of Antioxidant, anti UV, anti aging etc. Advantages, make long life span for 10to 15 years.

### 4. Performance

Features	Performance in brief
Environment friendly	In production process, just some Nitrogen release, no pollution air happened; Pipe itself has good insulation performance and reduces heat loss rate.
Adiabaticity	The insulation layer uses closed cell structure, heat conductivity coefficient is just 0.03-0.04KCAL/MH°C
Moisture resistance	not only thermal insulation, and also moisture proof, no water absorption.
Stability	anti corrosion, low temperature resistance, anti-aging, long life span
Aesthetic	good flexibility, soft and tenacity, comfortable feel, no need decoration.
Application property	Just cut and fast installation, without toxic gas and dusty
Extensive uses	Refrigerator storage, center air-conditioning, solar water pipe, civil construction etc pipe.

### 5. Technology parameter

Testing Items	Parameter
Degree of cross linking	≧ 65
Shrinking percentage	≧ 3
Hydraulic test	20°C, pressure at 12.0MPa for 1hr, no leakage, no broken
	95°C, pressure at 4.8Mpa for 1hr, no leakage, no broken
	95°C, pressure at 4.7MPa for 1hr, no leakage, no broken
	95°C, pressure at 4.6MPa for 1hr, no leakage, no broken
	95°C, pressure at 4.4MPa for 1hr, no leakage, no broken

Density g/cm <sup>3</sup>	≧0.94
Tensile strength N/mm <sup>2</sup>	20℃ 19-26;100℃ 9-13
Elongation at break	20℃ 350-550; 100℃ 500-700
Long term use temperature	-40℃ - 110℃
Coefficient of linear expansion (m/k)	20℃ 1.4x10 <sup>-4</sup> ;100℃ 2.05x10 <sup>-4</sup>
Vicat softening point	133
Heat conductivity coefficient(W/mKw)	0.35

## 6. Specs about the pipes

Material:

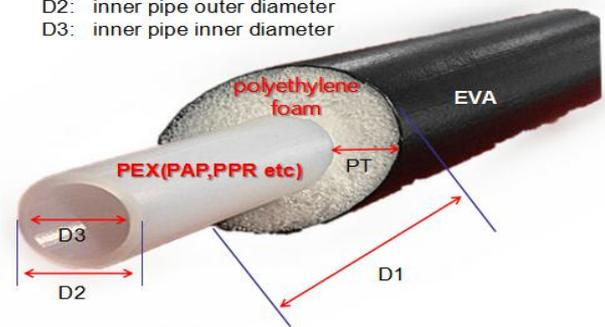
Insulation material: high density polyethylene foam

Outer jacket:EVA

Inner pipe:PEX(PAP,PPR etc.)

(Packed in 100meters in roll)

D1: ALLINONE pipe diameter  
D2: inner pipe outer diameter  
D3: inner pipe inner diameter



Model	Picture	Specifications	
		Dimensions	Weight kg/m
16/6mm (16x2.0)		D1=28mm,D2=16mm,D3=12mm,PT=6mm	
16/8mm (16x2.0)		D1=32mm,D2=16mm,D3=12mm,PT=8mm	
16/10mm (16x2.0)		D1=36mm,D2=16mm,D3=12mm,PT=10mm	
20/6mm (20x2.0)		D1=32mm,D2=20mm,D3=16mm,PT=6mm	
20/8mm (20x2.0)		D1=28mm,D2=16mm,D3=12mm,PT=6mm	
20/10mm (20x2.0)		D1=40mm,D2=20mm,D3=16mm,PT=10mm	
25/10mm (25x2.5)		D1=45mm,D2=25mm,D3=20mm,PT=10mm	

### 7. Products display

