

PVC

THE IDEAL COPPER TUBE FOR CARRYING DRINKING WATER AND SUITABLE FOR BUILDING PLANTS FOR GAS DISTRIBUTION.

SILMET PVC, a copper tube pre-insulated with PVC, produced with cutting-edge machinery, in compliance with all the international reference standards and manufactured according to Presidential Decree no. 1095/68 and Ministerial Decree no. 174 of 6 April 2004 of the Italian Department of Health - ref. European Council Directive no. 98/83/EC regarding the transport of drinking water and suitable for building plants for transporting gas (UNI CIG 7129).

The characteristics of our PVC coating make the tube resistant to abrasions and corrosion and the particular internal star-shaped structure allows the correct expansion of the copper tube without jeopardising the condition of the coating. The PVC coating is odourless, non-toxic and is made without the use of CFCs. It is suitable to be used in plants with operating temperatures ranging from -80°C to +100°C.

The copper tube EN 1057 is marked **CE** as required by EU 305/2011 EU Construction Products Regulation (CPR).

THICKNESS OF THE INSULATING SHEATH	: 2 mm
USAGE TEMPERATURES	: -80 °C +100 °C
HERMAL CONDUCTIVITY	: 0,0397 W · m ⁻¹ · K ⁻¹
RESISTANCE TO FIRE	: self-extinguishing
WRAPPING	: coils individually wrapped with transparent film for further protection

PVC COPPER TUBE

The **PVC copper tube** is supplied in 50-metre coils (25 metres with Ø 22 mm) marked at intervals also indicating the relative metres.

The core of the **SILMET PVC** is the **ESENCOR** copper tube providing excellent protection against corrosion and is the result of scientific studies and tests that guarantee a considerably lower level of residual carbon than that required by manufacturing standards.

The main characteristics of the **SILMET PVC** sheath are excellent plasticity, mechanical resistance to abrasions and corrosion, all ensuring that the tube lasts for a long time.

The pre-insulated copper **PVC SILMET** tube is mainly used in under-floor heating plants, water distribution systems and in the production of gas and air lines.

CHARACTERISTICS OF THE ESENCOR COPPER TUBE

Alloy	Cu-DHP CW024A (Cu = 99.90% min. – P = 0.015 ÷ 0.040%)
Physical state	Annealed
Unit tensile strength	220 MPa/mm ² min.
Percentage elongation	40% min.
Internal cleanliness	C max. 0,20 mg/dm ²
Dimensions and tolerances	in compliance with standard EN 1057
Internal surface roughness	RA 1/10 micron
Linear thermal expansion coefficient	0.00168 mm/m °C
Thermal conductivity at 20 °C	364 W/m k



TABLE OF THE DIMENSIONS OF THE SILMET PVC COPPER TUBE

dimensions without insulation mm	diameter with insulation mm	thickness of insulating sheath mm	bursting pressure MPa	operating pressure MPa	coil length m	water content per meter l/m
6 X 1	10	2	74,8	18,7	50	0,0126
8 X 1	12	2	56,1	14,03	50	0,0283
10 X 1	14	2	44,88	11,22	50	0,0503
12 X 1	16	2	37,4	9,35	50	0,0785
14 X 1	18	2	32,06	8,01	50	0,1131
15 X 1	19	2	29,92	7,48	50	0,1327
16 X 1	20	2	28,05	7,01	50	0,1539
18 X 1	22	2	24,93	6,23	50	0,2011
22 X 1	26	2	20,4	5,1	25	0,3142

PALLETISATION OF SILMET PVC COATED COILS

measurement Ø x thickness mm	coil length m	coils per pallet n	meters per pallet m	approx. gross pallet weight kg	dimensions of pack cm
10 X 1	50	30	1.300	350	h 220 X Ø 80
12 X 1	50	30	1.300	400	h 220 X Ø 80
14 X 1	50	27	1.350	545	h 220 X Ø 80
15 X 1	50	26	1.100	400	h 220 X Ø 80
16 X 1	50	25	1.250	600	h 220 X Ø 80
18 X 1	50	23	1.000	480	h 220 X Ø 90
22 X 1	25	26	500	400	h 220 X Ø 90

The packs cannot be stacked.

A maximum of 2 packs with a large diameter (h 220 x Ø 90 cm) and available for other coated products, are loaded onto the pallet side-by-side together with a third smaller pallet.

The others can be loaded side-by-side in threes.

PVC copper tube is suitable for the following fields of use and with the following references:

POTABLE WATER, HOT AND COLD

Presidential Decree no. 1095 of 3 August 1968

Amendment to Article 125 of the General Health Regulation approved by Royal Decree no. 45 of 3 February 1901 and amended by Royal Decree no. 369 of 23 June 1904.

European Directive no. 98/83/EC of 3 November 1998

on the quality of water intended for human consumption (OJ No. L 330, 12.05.1998).

Decree no. 31 of 2 February 2001

Implementation of Directive no. 98/83/EC on water intended for human consumption.

Ministerial Decree no. 174 of 6 April 2004

Regulation of materials and objects that can be used in stationary plants for collection, treatment, supply and distribution of water intended for human consumption.

DISTRIBUTION OF LIQUID AND GASEOUS FUELS BY:

UNI CIG 7129

Gas systems for household and similar powered by the distribution network - Design and installation.

HEATING

Subject to the provisions of Law no. 10 of 9 January 1991 and Presidential Decree no. 412 of 26 August 1993.