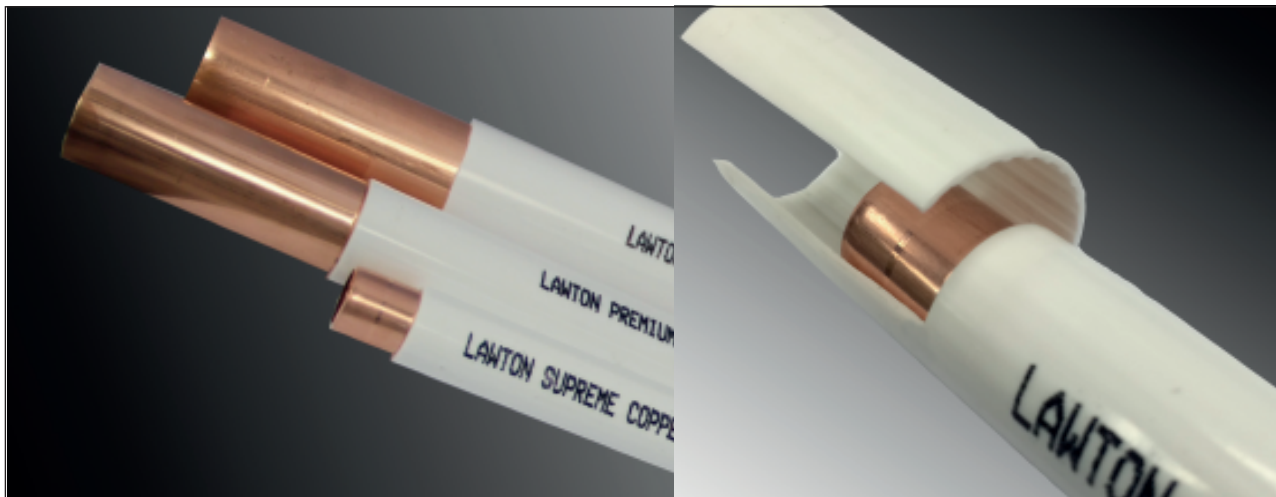


# PVC Coated Copper Tubes Data Sheet



The Plastic that we are using for the tube coating is a Low Density Polyethylene along with a World Wide UV stabiliser.

The Physical properties are as follows:

## Mechanical

Melting point:	114°C
Vicat Softening Point:	93°C (This can be generally treated as the maximum operating temperature)
Brittleness Point:	← -75°C
Hardness:	55 Shore D
Tensile Break:	13.40 MPa
Flexural Strength:	8.10 MPa
Elongation at Break	500%
<b>Electrical</b>	
Volume Resistivity:	→1015 Ohm-cm <sup>3</sup>
Surface Resistivity:	→1015 Ohm-cm <sup>2</sup>

Resistance to some common chemicals below.

## Polyethylene and Very Good Chemical Resistance

- Acetic acid
- Ammonium hydroxide 30%
- Calcium hydroxide 30%
- Diethylene glycol
- Ethylene glycol
- Ethanol 100%
- Glycerin
- Glycol
- Hydrogen peroxide 30%
- Mercury
- Methanol
- Potassium hydroxide 30%
- Sodium hydroxide 30%

## Polyethylene and Medium Chemical Resistance

- Dibutylether
- Ethylene acetate 100%
- Furfurol 100%
- Heptane
- Paraffin

## Polyethylene and Good Chemical Resistance

- Acetone
- Formaldehyde 10-40%
- Gas oil
- Caproic acid
- Iodine
- Isobutanol
- Isopropanol
- Mineral oil
- Motor oil
- Natural gas
- Gasoline
- Phenol
- Transformer oil
- Vaseline

## Polyethylene and Poor Chemical Resistance

- Diethylether
- Ethylenechloride
- Hydrogen peroxide 90%
- Methylene chloride

## Polyethylene and None Chemical Resistant

- Acetylene dichloride

## PVC Coated Copper Tubes

This range is ideal for use within walls, outside, underground and in aggressive atmospheres. The covering creates a thermal barrier reducing heat loss underground and condensation from exposure in extreme weather conditions. Tubes are specifically made in 5.8m lengths for direct loading and shipping in full containers.

Tubes can withstand temperatures from -40 to +120 degrees centigrade.

Tubes can be bent (except 35-54mm) and jointed as per standard plain EN1057 tubes using EN1254 fittings.

To expose bare copper, plastic coating needs to be cut and pulled back away from the joint and flame (if brazing). Once joint has been made coating needs returning back to original position and both joint and cut need to be protected using an impervious plastic tape.

### White Plastic Coated Copper Tubes to BS EN 13349 / BS EN 1057 R250/R290

**LAWTON**  
COATED

Product Code	O.D. (mm)	Length (m)	Wall (mm)	Tube Thickness
TXPVCW015	15	5.8 & 6	0.7	1.0
TXPVCW022	22	5.8 & 6	0.9	1.0
TXPVCW028	28	5.8 & 6	0.9	1.0
TXPVCW035	35	5.8 & 6	1.2	1.5
TXPVCW042	42	5.8 & 6	1.2	1.5
TXPVCW054	54	5.8 & 6	1.2	1.5
TXPVCW067	67	5.8 & 6	1.2	1.5
TXPVCW076	76	5.8 & 6	1.5	1.5

### PVC Covered Coils to BS EN 1057 R220

**LAWTON**  
COATED

Product Code	O.D. (mm)	Length (m)	Wall (mm)	Tube Thickness
TWPVCBLK008	8 PVC Black	25	0.8	1.0
TWPVCW008	8 PVC White	25	0.6	1.0
TWPVCW010	10 PVC White	25 & 50	0.7	1.0
TWPVCY015	15 PVC Yellow/Blue	25	1.0	1.5
TWPVCY022	22 PVC Yellow/Blue	25	1.2	1.5
TWPVCY028	28 PVC Yellow	20	1.2	1.5

### PVC Covered Tube to BS EN 1057 R250

**LAWTON**  
COATED

Product Code	O.D. (mm)	Length (m)	Wall (mm)	Tube Thickness
TXPVCY015	15 PVC Yellow	3 & 6	0.7	1.0
TXPVCY022	22 PVC Yellow	3 & 6	0.9	1.0
TXPVCY028	28 PVC Yellow	3 & 6	0.9	1.0

### Green Plastic Coated Copper Tubes to BS EN 13349 / BS EN 1057 R250/R290

**LAWTON**  
COATED

Product Code	O.D. (mm)	Length (m)	Wall (mm)	Tube Thickness
TYPVCG015	15	5.8 & 6	0.7 or 1.0	1.0
TYPVCG022	22	5.8 & 6	0.9 or 1.2	1.0
TYPVCG028	28	5.8 & 6	0.9 or 1.2	1.0
TYPVCG035	35	5.8 & 6	1.0 or 1.5	1.5
TYPVCG042	42	5.8 & 6	1.0 or 1.5	1.5
TYPVCG054	54	5.8 & 6	1.2 or 1.5	1.5
TYPVCG067	67	5.8 & 6	2.0	1.5
TYPVCG076	76	5.8 & 6	2.0	1.5
TYPVCG108	108	5.8 & 6	2.5	1.5

### Nature of Heat Insulator

**LAWTON**  
PLUMBING

Test	Unit	Onside of insulator	Inside of insulator
Tensile Strength	N/mm [kg/cm <sup>2</sup> ]	31.5 <sup>2</sup> 10 [3.2]	29.5 <sup>2</sup> 10 [3.0]
Elongation	%	70	100
Compression strain	% [25%]	3.4	6
Water absorbing capacity	G/m <sup>2</sup>	0.003	0.008
Conductivity factor	W/(mk <sup>2</sup> ) [kcal/m <sup>2</sup> hm <sup>2</sup> ]	0.040[0.035]	0.038[0.033]
Temperature of heat resisting		-40 ~120	-40 ~120