

## Fotolec Technologies Ltd T5 FEP Tubing Data Sheet

### Product Description

A high temperature FEP Fluoropolymer tubing which when externally applied to fluorescent lamps will contain glass fragments in the event of breakage in compliance with Class A 'Single Band' IEC 61549.

### Product Features

- Lamps with the tubing applied will be suitable for open and enclosed fixture operation.
- Tubing service temperature range -70°C to +200°C
- The tubing service life is equal to or greater than the lamp life.
- 96% UVA transmission.
- Tubing manufactured & tested in accordance with ISO9001:2015

### Product Benefits

- When tubing is applied externally to fluorescent lamps it will provide an industry compliant glass free environment protecting products and personnel in the event of an incident.
- Tubing complies with retail hygiene audits.
- Tubing is inert to acids and alkalis.
- Tubing will not discolour or degrade from UV radiation.

### Application

- Fluorescent lamps coated can be used for Food, Beverage, Packaging, Pharmaceutical, Fast Food outlets, Restaurant and Kitchens (FDA 21CFR177.1550 Food Contact Compliant).
- Coated lamp suitable for conventional or electronic control gear installation.

### Environment

- Coated lamps protect surrounding areas from contamination in the event of a breakage.
- Tubing material is recyclable and REACH compliant.

### Material Properties

Tensile strength (MPa)  $\geq 24$

Elongation at break (%)  $\geq 300$

Melting Point ( $^{\circ}$ C)  $265 \pm 10$

Breaking down voltage (KV/mm) 20~24

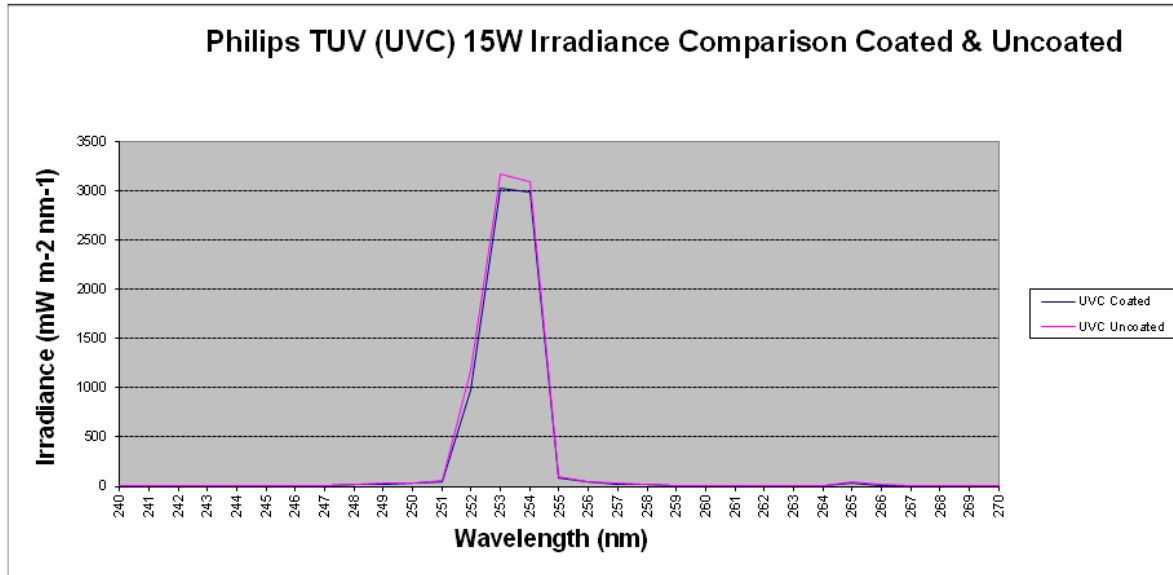
Volume resistance ( $\Omega$ -cm)  $1 \times 10^{16}$

Dielectric constant ( $10^6$ HZ $\geq$ ) 2.10

Dielectric loss tangent ( $10^6$ HZ)  $3.0 \times 10^{-4}$

High resistance to thermo-stress craze.

### Example of irradiance transmission through the tubing FEP material



### Sleeve Capability

Shrinking temperature recommendation for application onto lamp 110° to 150 °C

Nominal wall thickness 250u ±15u

Pre-shrunk OD = 17.5mm

Fully recovered OD = 15.6mm