



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) ≥ 24

Elongation at break (%) ≥ 300

Melting Point ($^{\circ}$ C) 265 ± 10

Breaking down voltage (KV/mm) 20~24

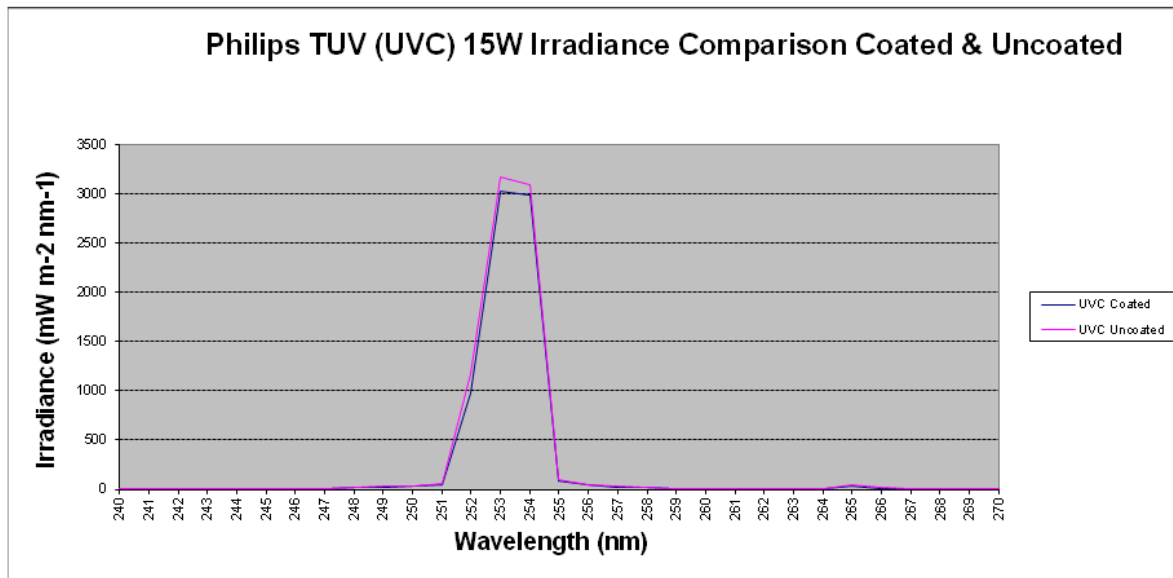
Volume resistance (Ω -cm) 1×10^{16}

Dielectric constant (10^6 HZ \geq) 2.10

Dielectric loss tangent (10^6 HZ) 3.0×10^{-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