Technical Data Sheet

TFCF
Fluorocoat Surface Modifier

Product Description

TFCF is a unique, fluoro polymer coating formulated to provide high levels of liquid repellency to printed circuit boards and other electronic devices. Once dried, TFCF forms a thin transparent film of very low surface energy. The low film strength allows assemblies to be coated without masking. As TFCF is mechanically weak, it is easily removed by minimal friction, therefore eliminating the requirement for masking components such as switches, piezo speaker devices and contacts prior to coating.

Features

- TFCF provides excellent repellency to:
  - Hydrocarbon oils
  - Silicone oils
  - Synthetic fluids
  - Aqueous solutions
- Excellent adhesion on a wide variety of substrates.
- Fast & cost effective coating procedure
- Good operating temperature range & resistance to humidity.
- Contains a UV trace to allow for easy inspection
- Can be soldered through without fear of highly toxic gases being produced (contains no isocyanates).
- Non-corrosive to Cadmium and Zinc plate (contains no phenols).
- Resistant to mould growth.
- Free surface energy lower than that of PTFE or polyethylene

Approvals:	**RoHS Compliant (2002/95/EC):**	**Yes**
Liquid Properties:	Appearance:	Colourless liquid
	Specific Gravity (Density) @ 20°C:	0.72
	VOC Content:	97%
	Flash Point:	7°C
	Solids content:	2%
	Viscosity @ 20°C:	~ 2 Centipoise
	Drying Time:	5 minutes touch dry
	Recommended Drying Time:	24 Hours @ 20°C 15 minutes @ 100°C (optional) *
	Coverage @ ~2µm :	13.8m^2 (Bulk) 3.5 m^2 (250ml Pump Spray)

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Dry Film Coating:	Colour:	Colourless
	Operating Temperature Range:	-50°C to +125°C
	Flammability:	Self Extinguishing
	Moisture Resistance	Excellent
	Surface Energy	<18 dynes/cm

* A slight increase in repellency occurs if the film is heat cured after drying.

Packaging	Description	Order Code	Shelf Life
Fluorocoat Surface Modifier	250ml pump spray	TFCF250ML	48 Months
	5 litre bulk	TFCF05L	48 Months

Directions For Use

TFCF can be sprayed, dipped or brushed. It is not necessary to dilute TFCF before spraying. Temperatures of less than 16°C or relative humidity in excess of 75% are unsuitable for the application of TFCF. As is the case for all solvent based coatings, adequate extraction should be used (refer to MSDS for further information).
Substrates should be thoroughly cleaned before coating. This is required to ensure that satisfactory adhesion to the substrate is achieved. Also, all flux residues must be removed as they may become corrosive if left on the PCB. Electrolube manufacture a range of 100% Ozone Friendly cleaning products in both the hydrocarbon solvent and aqueous fields. Electrolube cleaning products produce results within Military specification.

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