

ECOFREC™ TF49



HALOGEN FREE TACKY FLUX COLORLESS RESIDUE

BENEFITS

ECOFREC™ TF 49 is a halogen free, no-clean tacky flux designed for lead-free and leaded applications. After reflow, the residue is non-corrosive.

It is recommended for:

- Soldering of spheres
- Components rework (BGA, SMT components)
- Flip Chip process

Transparent and colorless residue

SPECIFICATIONS

Flux appearance	Light yellow
Density 20°C (g/cm³)	1
Solubility in water in alcohol	Not soluble Soluble
Halogen content	No halogen
Viscosity (Pa.s at 20°C) (Brookfield RVT TF at 5 RPM)	300 - 500

CHARACTERISTICS

ECOFREC™ TF 49 is a high viscosity tacky flux.

- Free of halide (Fluoride, Chloride, Bromide) and amine
- Non corrosive residue
- Complex blending of rosins, activators and solvents.

Standards tests	Results	Procedures
Flux Classification	ROL0	ANSI/J-STD-004
SIR/Electromigration (IPC)	pass	ANSI/J-STD-004
Bono corrosion test 85°C/85% RH – 15 days	Pass: Fc < 1%	Inventec MO.SB.10029
Chromate paper	pass	ANSI/J-STD-004
Copper mirror	pass	ANSI/J-STD-004

PROCESS PARAMETERS

ECOFREC™ TF49 can be applied by dispensing, dipping, brush or stencil printing.

The tacky properties of ECOFREC™ TF49 ensure that components are kept in position until the alloy is reflowed. A variety of reflow methods may be used to produce the solder joint with ECOFREC™ TF49 ; these include soldering irons, hot gas and hot bar devices, IR or convection oven or vapour phase.

Cleaning

After soldering, the flux residue remaining of ECOFREC™ TF49 does not have to be removed by a cleaning operation as it is chemically inert. However, if cleaning is required, the residue left after reflow can be easily removed if needed with a large range of cleaning solutions, such as detergents, hydro-carbonated solvents or halogenated solvents, all included in the INVENTEC cleaning range.

PROCESS Type	INVENTEC Defluxing solutions
Manual	Topklean™ EL10F/ Topklean™ EL60/ Quicksolv™ DEF90 EL
Aqueous system (Immersion or spray)	Promoclean™ DISPER 605 and DISPER 607
Co-solvent system	Topklean™ EL 20 series
Under vacuum system	Topklean™ EL 20D
Mono-solvent (Azeotropic)	Promosolv™ 70ES

PACKAGING, STORAGE & SHELF LIFE

To ensure the best product performance, the recommended storage temperature range is room temperature. For an optimal preservation, store cartridges and syringes in vertical position, tip downwards.

Syringes	10g or 30g	18 months
Plastic Jar	100g or 500g	18 months
Cartridges	300g	18 months

HSE

Use in well-ventilated areas. Safety glasses and gloves should always be worn when handling the flux. No issues when used as recommended. Please refer to Material Safety Data Sheet before use.

INVENTEC Material Safety Data sheets can be found at www.quickfds.com

In accordance with the Annex II of Directive 2011/65/UE (RoHS), including its amendments, we certify that this product does not contains quantities above 0.1% of Hg, Pb, Cr VI, PBB, PBDE, DEHP, BBP, DBP, DIBP and above 0.01% of Cd. INVENTEC PERFORMANCE CHEMICALS also fulfils its direct obligations under the REACH and Conflict Mineral regulations.

This data is based on information that the manufacturer believe to be reliable and offered in good faith. In no event will INVENTEC be responsible for special, incidental and consequential damages. The user is responsible to the Administrative Authorities (regulations for the protection of the Environment) for the conformity of his installation.

BRY-FP-279-v4-1/10/2020