

ECOFREC™ TF48



HALOGEN FREE TACKY FLUX EXCELLENT DEPOSIT DEFINITION

BENEFITS

ECOFREC™ TF 48 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:

- Spheres soldering
- Components rework (BGA, SMT components)
- Flip Chip process

Best in class for dispensing, dipping and printing applications

SPECIFICATIONS

| | |
|---|------------------------|
| Flux appearance | Amber |
| 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) | 350 - 550 |

CHARACTERISTICS

ECOFREC™ TF 48 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™ TF48 can be applied by dispensing, dipping, brush or stencil printing.

The tacky properties of ECOFREC™ TF48 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™ TF48 ; 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™ TF48 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.

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|-------------|--------------|-----------|
| 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.

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