

ECOFREC™ PoP 50



No-clean tacky flux PoP process

BENEFITS

ECOFREC™ PoP 50 is a tacky flux designed for a **Package on Package** process: pre-assembly of stacked BGA packages prior to reflow. It is suitable for lead-free and leaded soldering, with or without nitrogen

ECOFREC™ PoP 50 allows:

- An application by dipping or dispensing. Both methods allow for reproducible volumes of flux to be applied to the solder spheres.
- An excellent solderability with all finishes: Cu-OSP, NiAu, Immersion Sn and Ag.

SPECIFICATIONS

Color	Amber
Odor	Very Low
Solubility in water Alcohol	Not soluble Soluble
Classification according ANSI/J-STD-004	ROLO
Halogen content	No Halogen
Density at 20°C	1
Viscosity (Pa.s at 20°C) <i>(Measured on BROOKFIELD RVT viscometer with Mobile F HELIPATH system, at 5 rpm)</i>	50 - 150

CHARACTERISTICS

ECOFREC™ PoP 50 is a tacky flux made of a complex blending of resins, activators and solvents. The Rheology and the Tackiness of **ECOFREC™ PoP 50** are optimized to sufficiently hold packages in place before and during reflow.

PCB cleaning is not required after soldering because the residue is chemically inert.

PROCESS PARAMETERS

ECOFREC™ PoP 50 is applied by dipping the component into the flux.

When dipping, the volume of flux on the package can be optimized by changing dipping-equipment parameters. Key variables include: sphere size, sphere pitch, flux shear speed, dwell time, and depth of sphere immersion.

The flux ECOFREC™ PoP 50 has been successfully evaluated on SIPLACE LDU-X dip application equipment.

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CLEANING

After soldering, the flux residue remaining of ECOFREC™ PoP 50 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. This is also a best practice for a robust adhesion if conformal coating is to be applied on the board. In the table below is a quick reference about INVENTEC PCBA defluxing solutions.

PROCESS Type	INVENTEC PCBA Defluxing solutions
Manual	Topklean™ EL10F/ Topklean™ EL60/ Quicksolv™ DEF90 EL
Aqueous System (Immersion or spray)	Promoclean™ DISPER 607
Novec™ HFE + Co-solvent	Topklean™ EL 20A and EL 20R
Under Vacuum System	Topklean™ EL 20D
Azeotropic Solvent	Promosolv™ 70ES

PACKAGING, STORAGE & SHELF LIFE

ECOFREC™ PoP 50 must be stored in a cool and ventilated area between 5° and 30°C. Shelf life is one year.

For an optimal preservation, store cartridges and syringes in vertical position, tip downwards.

Jars	100g or 500g	12 months
Cartridges	300g	12 months
Syringes	10g or 30g	12 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

Although the conformity to ROHS 2002/95CE applies EQUIPMENT put on the market and not a component in particular, we warranty that this product contains less than 0.1% of mercury, lead, chromium VI, polybrominated biphenyls (PBB) and polybrominated diphenyl ethers (PBDE) and less than 0.01% for the cadmium, in accordance with the decision of The European Commission dated 18/08/2005, fixing the maximal concentration values.

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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