



SOLDERING

ECOFREC™ POP WS30

WATER SOLUBLE TACKY FLUX
POP AND FLIP CHIP PROCESS
EXCELLENT WETTING PROPERTIES

BENEFITS

ECOFREC POP WS30 is a water-soluble tacky flux designed for Package on Package process and Flip Chip process. It is suitable for lead-free and leaded soldering, with or without nitrogen.

The rheology and the tackiness of ECOFREC POP WS30 is optimized to sufficiently hold packages in place before and during reflow.

PCB cleaning is required after soldering with a water-based process.

PERFORMANCE	<ul style="list-style-type: none"> ▪ Excellent wetting ▪ Great solderability with all finishes: Cu-OSP, NiAu, Immersion Sn and Ag ▪ Residues are easily cleaned
COST	<ul style="list-style-type: none"> ▪ Helps to avoid pre-mature failures of your electronic assembly ▪ No flux residue cleaning required
HSE	<ul style="list-style-type: none"> ▪ No CMR substances ▪ Non-flammable

FEATURES

SPECIFICATIONS	ECOFREC POP WS30
Appearance	Light yellow
Solubility in water	Soluble
Solubility in alcohol	soluble
Density at 20°C	1,0
Halogen content	No halogen
Viscosity (Pa.s at 25°C) Thermoscientific rheometer*	20

*The equipment used to test is plate/plate mobile 35mm diameter.

CHARACTERISTICS

CHARACTERISTICS	VALUES	
Flux Classification	REH1	ANSI/J-STD-004
	122	ISO 9454
Solder balling test	Pass	ANSI/J-STD-005
Copper mirror	H	ANSI/J-STD-004
Copper corrosion	major	ANSI/J-STD-004

PROCESS RECOMMENDATION

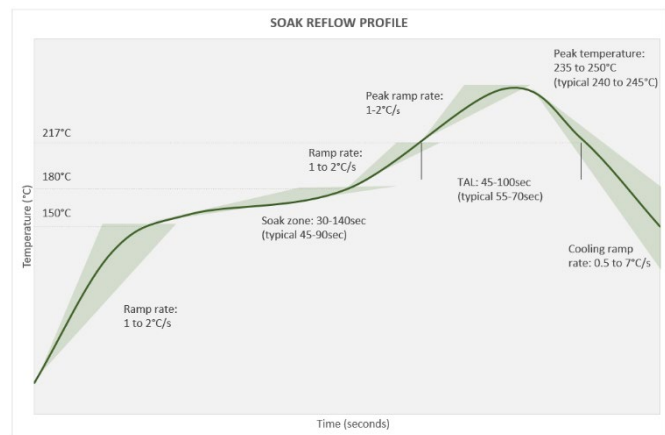
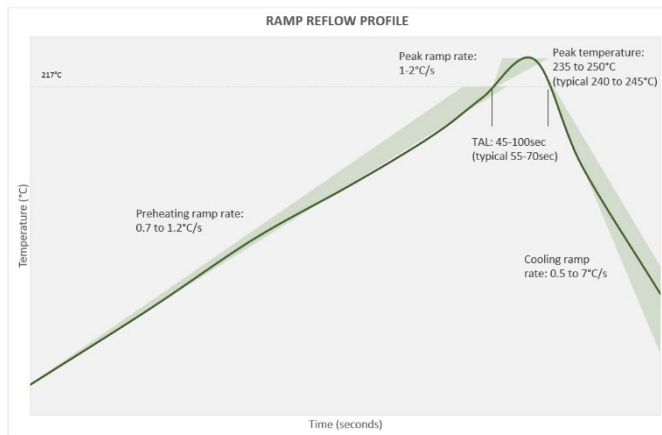
The best process will depend on factors such as operating conditions, equipment, board or component design. Our team is ready to advise you.

ECOFREC POP WS 30 is applied either by dispensing or 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.

REFLOW GUIDELINE

This flux can be processed under air or nitrogen. As during Flip-Chip attached process, there is reflow done, please find below the suggested profile for SAC 305 alloy.



CLEANING POST SOLDERING

After soldering, the remaining flux residue can be removed by DI water or a water-based cleaning operation with a detergent. The residue left after reflow can be easily removed with a large range of INVENTEC cleaning solutions. The table below is a quick reference for INVENTEC PCBA defluxing solutions.

Inventec has over 60 years' experience in high-tech cleaning for aqueous and solvent based systems. Our solder materials are aligned with our cleaning solutions, which guarantees excellent cleaning.

PROCESS TYPE	PCBA DEFLUXING SOLUTIONS
Manual	Quicksolv™ DEF90, Quicksolv™ DEF70, Promoclean™ TP61
Aqueous (Immersion or spray)	Promoclean™ DISPER 607, Promoclean™ DISPER 707, Promoclean™ DISPER 800

Other products available, depending on specific customer requirements. Also check our maintenance cleaning solutions.

PACKAGING, STORAGE & SHELF LIFE

- To ensure the best product performance, the recommended storage temperature range is between 20°C to 30°C / 68°F to 86°F
- For an optimal preservation, store syringes in a vertical position, tip downwards.
- Shelf-life is 6 months for syringe packaging

AVAILABLE PACKAGING

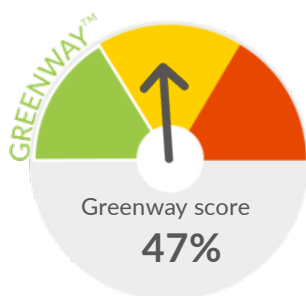


SYRINGE
30g / 30cc

Please verify the packaging details, including volume and availability, with your sales representative, as they may vary depending on the production facility where the product is manufactured.

HEALTH, SAFETY & ENVIRONMENT

ECOFREC POP WS30 is **NOT** a **GREENWAY** product. Although fully in line with safety & environmental regulations, this product doesn't match our strict criteria to be labelled as a Greenway product. More info on our Greenway concept via this [link](#).



LOOKING FOR A MORE SUSTAINABLE SOLUTION?

GREENWAY ALTERNATIVE

- We currently don't have a Greenway alternative but our target is to develop one in the near future. In case you want us to prioritize the development of a Greenway alternative, do not hesitate to contact us.

No issues when used as recommended. Product must be handled in a well-ventilated room, away from any flames. Fumes must be evacuated from flux and solder workstations by means of an efficient exhaust. Safety glasses and gloves should always be worn when handling the flux.

In accordance with the Annex II of Directive 2011/65/UE (RoHS), including its amendments, we certify that this product does not contain 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.

Please refer always to the Safety Data Sheet (SDS or MSDS) prior to use. Our SDS can be downloaded at www.quickfds.com. We will request to provide your email address, so we can automatically send you a new version of the SDS when a future update would occur.

TECHNICAL SUPPORT & FREE-OF-CHARGE TESTING

Inventec has a worldwide dedicated Technical Support team to help you along the various stages of our cooperation.

Depending on your request, we provide online or onsite support

- to select the right product based on your specific needs.
- to assist you in your product qualification process.
- to guide you with the initial set up of your process at all your worldwide manufacturing facilities.
- to provide fast response on technical issues which could occur at any time during mass production.

When prior cleaning is required, customers are also welcome in our CLEANING CENTERS to see the process in action and to get convinced by our solutions. We cover water and solvent based processes.

Inventec is unique in the world by developing not only soldering materials but also cleaning and coating solutions. These materials are very closely linked with each other from a process point of view. Talking to our Technical Team, who understands very well these 3 different product groups, will help you greatly to overcome technical challenges within your overall process.

Contact our technical support via contact@inventec.dehon.com or your local sales representative.

ABOUT INVENTEC

Inventec is a global provider of SOLDERING, CLEANING, COATING, COOLING materials for Electronic, Semiconductor and Industrial applications. For over 60 years we have shown leadership in innovation by putting HEALTH IMPACT, SUSTAINABILITY and RELIABILITY at the core of our product development.

With ISO 9001 & 14001 production sites in France, Switzerland, USA, Mexico, Malaysia and China we can guarantee a smooth and cost-effective supply chain.

We supply to many industries but the excellent performance of our products in applications which demand high reliability, leads us to focus especially on the AUTOMOTIVE, AEROSPACE, SEMICONDUCTOR, ENERGY and MEDICAL industry.

www.inventec.dehon.com



SOLDERING
CLEANING
COATING
COOLING

This data is based on information that the manufacturer believes to be reliable and offered in good faith. In no event will INVENTEC PERFORMANCE CHEMICALS 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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