



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 are 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"> <li>Application by dipping or dispensing.</li> <li>An excellent solderability with all finishes: Cu-OSP, NiAu, Immersion Sn and Ag</li> <li>Post soldering residues easily cleaned either by pure water or with detergent.</li> </ul>
COST	<ul style="list-style-type: none"> <li>Stable process as great reproducible volumes of flux are applied</li> </ul>
HSE	<ul style="list-style-type: none"> <li>No CMR containing substances</li> <li>RoHS &amp; REACH compliant</li> </ul>

## FEATURES

SPECIFICATIONS	ECOFREC POP WS 30
Color	Light yellow
Odor	Very low
Solubility in water	Soluble
alcohol	Soluble
Density at 20°C	About 1
Typical viscosity at 25°C Thermoscientific rheometer*	About 20Pa.s

\*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

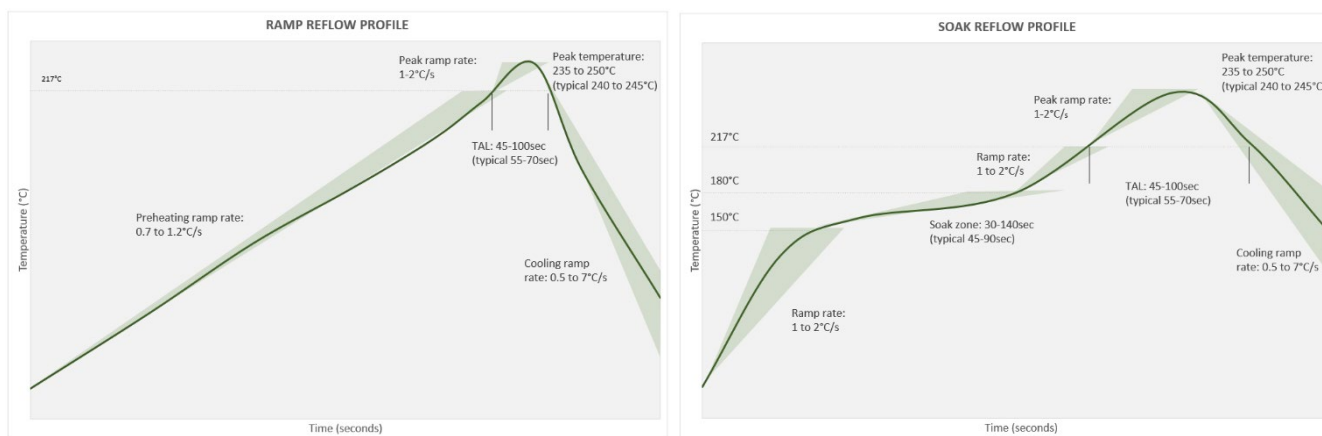
## PROCESS RECOMMENDATION

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 almost 60 years experience in high-tech cleaning for aqueous and solvent based systems. Our solder materials are aligned with our cleaning solutions, providing you a guaranteed cleaning result with our materials.*

PROCESS TYPE	PCBA DEFLUXING SOLUTIONS
Manual	Quicksolv™ DEF90 / Topklean™ EL10F/ Topklean™ EL60
Aqueous system (Immersion or spray)	Promoclean™ DISPER 607 / Promoclean™ DISPER 707

Other products available, depending on specific customer requirements. Check also our maintenance cleaning solutions.

## PACKAGING, STORAGE & SHELF LIFE

- To ensure the best product performance, the recommended storage temperature range is from 20°C to 30°C.
- For an optimal preservation, store cartridges and syringes in a vertical position, tip downwards.
- Shelf-life is 6 months.

### AVAILABLE PACKAGING



30g / 30cc SYRINGE

## HEALTH, SAFETY & ENVIRONMENT

No issues when used as recommended.

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.

Please refer always to the Safety Data Sheet (SDS or MSDS) prior to use. Our SDS can be downloaded at [www.quickfids.com](http://www.quickfids.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

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Inventec has a worldwide dedicated Technical Support team to help you along the different 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 you 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](mailto:contact@inventec.dehon.com) or your local sales representative.

## ABOUT INVENTEC

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Inventec is a global provider of SOLDERING, CLEANING & COATING materials for Electronic, Semiconductor and Industrial applications. For over 40 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](http://www.inventec.dehon.com)



S O L D E R I N G • C L E A N I N G • C O A T I N G

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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