



SOLDERING

ECOREL™ EASY JP22

Sn62Pb36Ag2 LEADED SOLDER PASTE
JET PRINTING PROCESS
EASY CLEANABLE FLUX RESIDUES

BENEFITS

ECOREL EASY JP22 is especially designed to work on jet printing equipment and to guarantee continuous and consistent deposits of solder paste. Although the flux is chemical inert, it is easy to clean with water or solvent based processes.

PERFORMANCE	▪ Excellent continuous & consistent paste deposits ▪ Chemical inert flux residue reducing risk of electrochemical migration & corrosion ▪ Easy to clean reflowed flux residues
COST	▪ Minimizes line-down time & the need for re-work ▪ Increase lifetime and reliability of your product, hence reduces risk of premature failures
HSE	▪ No Halogen ▪ No CMR containing substances in flux media.

FEATURES

SPECIFICATIONS	ECOREL EASY JP22
Alloy	Sn62Pb32Ag2
Melting point (°C/°F)	178°C/352°F
Metal content (%)	86,5
Post reflow residues	Approximately 5% by w/w
Halogen content	No Halogen
Powder size	15-25 microns / Type 5
Viscosity* (Pa.s 20°C)	500-700
Syringe	Iwashita

*The equipment used to test viscosity is Brookfield RVT - TF at 5 rpm.

CHARACTERISTICS

CHARACTERISTICS	VALUES	TEST METHOD
Flux Classification	ROLO	ANSI/J-STD-004
	113	ISO 9454
Solder balling test	Pass	ANSI/J-STD-005
Copper mirror	Pass	ANSI/J-STD-004
Copper corrosion	Pass	ANSI/J-STD-004
SIR (IPC)	Pass	ANSI/J-STD-004
SIR (Bellcore)	Pass	Bellcore
Electromigration (IPC / Bellcore)	Pass	ANSI/J-STD-004 / Bellcore

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.

SOLDER PASTE PREPARATION

- Put the paste at room temperature for at least 4 hours prior to use.
- Syringes must be used in five days following their first use.

EQUIPMENT GUIDELINE

Depending on kind of jetting equipment, different parameter setup is required. Please ask equipment supplier for suggested setup.

REFLOW GUIDELINE

To improve wettability we recommend to reflow in a nitrogen atmosphere.

Linear preheating ramp rate is recommended. High density board may require a soak zone during preheating to stabilize the temperature over the circuit board before peak reflow.

REFLOW STEPS	REMARKS
Preheating ramp rate with linear preheating	0.8 to 1.2°C/s (according to the circuit board size and density)
Preheating steps in case of preheating soak zone	- From 20 to 150°C ramp rate 1 to 2°C/s - Soak zone between 140 to 180°C (284 to 356°F): 60-140s reflow
Peak ramp rate	1 to 2 °C/s
Peak temperature	210 to 235°C (410 to 455°F)
Time above liquidus	50 to 120s

CLEANING POST SOLDERING

This product is a no-clean solder paste, so cleaning is not required to meet IPC standards. The chemistry is specially designed so that any remaining flux residue is chemically inert and will not impact your assembled board or packaging under normal conditions. However, when cleaning is desired or required (e.g. high reliability assembly or to improved conformal coating adhesion), the flux residue can be easily removed with INVENTEC's own formulated flux cleaners.

*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 with our materials.*

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
Co-solvent	Topklean™ EL 80 + Promosolv™ rinsing solvents
Mono-solvent (vapor phase)	Promosolv™ 70ES, Promosolv™ 70IS

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 0°C to 10°C.
- For an optimal preservation, store syringes in a vertical position, tip downwards.
- Shelf-life is 6 months for syringes.

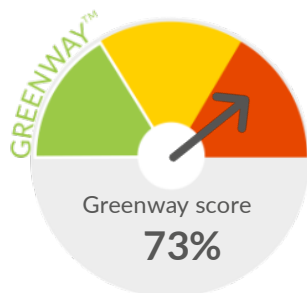
AVAILABLE PACKAGING



IWASHITA SYRINGE
100g (30cc)

HEALTH, SAFETY & ENVIRONMENT

ECOREL EASY JP22 is **NOT** a **GREENWAY** product. Due to the toxic nature of lead, lead containing solder paste will never qualify as a Greenway paste. Leaded solder paste are still allowed to be sold for some particular industries and applications. More info on our Greenway concept via this [link](#).



LOOKING FOR A MORE SUSTAINABLE SOLUTION?

GREENWAY ALTERNATIVE

- In case you can technically qualify a lead-free SAC solder paste, we can offer you a more sustainable solution.

No issues when used as recommended. Contains lead. Use in well-ventilated areas. Safety glasses and gloves should always be worn when handling the paste.

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, 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 & EASY-OF-CHARGE TESTING

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 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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