



PROMOSOLV[™] DE4

SOLVENT CLEANER FOR REMOVAL OF FLUX RESIDUES
VAPOR PHASE (MONO-SOLVENT) PROCESS
EXCELLENT CLEANING & LOW HSE IMPACT

BENEFITS

PROMOSOLV DE4 is developed as a drop-in replacement for trichlorethylene, NPB and other solvent. While reducing substantially the HSE impact, the defluxing power is at an equivalent level. Besides, it is an **equivalent to the phased out Novec 72DA** as it has the same proportion of components and same properties.

It is dedicated for removing reflowed flux residues and other contaminants on PCBA's, Power modules, lead frames, BGA's, PoP or SIP applications & LED assemblies. Its low surface tension allows very well cleaning and rinsing under low stand-off components and difficult to reach spaces. It has very good compatible with all metals, including very sensitive ones and also with most plastics & elastomers, however recommended to validate before use.

PROMOSOLV DE4 is formulated with safety in mind. Its composition gives excellent flammability suppression properties, which provides a very high stability when used in an equipment. Some products in the market may loose their flammability suppression compound due to evaporation when used in an equipment.

	Thermally and chemically stable in use
PERFORMANCE	 The very low surface tension allows deep rinsing under low stand-off components
	Short cleaning, rinsing and drying times
	Continuous recycling in equipment for a long bath-life
COST	Can be returned for recycling and re-use
	 The relative high boiling point reduces risk of solvent drag, so limiting consumption
	 Very low toxicity
HSE	 Low global Warming Potential (GWP) & no Ozon depletion potential (ODP)
	Non-flammable

SPECIFICATIONS

SPECIFICATIONS	VALUES	METHODS
Aspect	Colorless, clear	Visual
Purity (% weight)	> 99.5	Internal / MO.SB.10033
Isopropanol (% weight)	< 3	Internal / MO.SB.10033

CHARACTERISTICS

CHARACTERISTICS	VALUES
Boiling point (°C / F°)	44 / 111
Vapor pressure at 50°C (mm Hg)	360
Flash point	None
Density (g/cm³)	1,27
Surface tension (dynes/cm)	18
Cinematic viscosity (mm²/s)	0.35

PROMOSOLV DE4 PDS2023-6 ENv1

PROCESS RECOMMENDATION

The best process will depend on factors such as operating conditions, equipment, desired cleaning time and the nature of contaminants. Our team is ready to advise you.

PROCESS EXAMPLE

Removal of flux residues

PROMOSOLV DE4

Conc: 100%
Temp: 44°C / 111°F
US: optional
Time: 2-5 min

PROMOSOLV DE4

DRYING ZONE

Conc: 100% DE4 vapor
Temp: 44°C / 111°F
US: optional
Time: 2-5 min

RINSING

DRYING

- Do not remove parts too quick out of the drying zone to prevent unwanted loss of solvent.
- Compatibility report with different materials is available on request.
- In case of very heavy production load, Promosolv AD70 additive can be added to increase solubility of solder fluxes.
- It's recommended to work with a siliporite filter to separate water from the condensation loop.

PACKAGING, STORAGE & SHELF LIFE

- Keep products in closed original packaging and store at room temperature.
- Shelf life is minimum 18 months from production date when kept in recommended conditions.
- PROMOSOLV DE4 is an azeotropic-like formulation which guarantees a safe use & storage.

AVAILABLE PACKAGING



HEALTH, SAFETY & ENVIRONMENT

PROMOSOLV DE4 is **NOT** a **CREENWAY** 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 <u>link.</u>



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.

Contains no Reach Substances (on Candidate list, Annex XIV & XVII) / Contains no persistent organic pollutant (EC 850/2004) / Contains no Import/Export Hazardous substances (EU 649/ 2012).

Used polluted product can be returned to us for recycling if regulations permit. Please contact your local sales contact for more details on our ECOPROGRAM.

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.



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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.

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 cleaning materials but also soldering 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

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

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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