

SolFluor Ibérica:

The Fluorine Family of Spain

Since 2000, the Stenzig family has represented Solvay Fluor interests in the markets of Spain and Portugal. Thanks to this many years of experience as the former Solvay Fluor Marketing Manager in Spain, the founder of SolFluor Ibérica, Werner Stenzig sr., has excellent contacts with all clients and associations. The very flexible, quick and active young team – formed by son Werner jr. and daughters María and Isabel – is very familiar with the different Solvay Fluor markets, constantly promotes new applications and products, and responds to all of its customers' requests.

Proactive customer service and logistics support underpin Solvay Fluor's excellent reputation and market position. SolFluor is very close to the market and regularly visits established and future clients. Nearly every month Solvay Fluor managers from the various sites visit customers with our agents, because the Iberian peninsula is one of the leading markets for SBU Fluor business in Europe.

"Joven – dinamico – y con éxito" (young – dynamic – and successful) describes SolFluor Ibérica, S.L. perfectly.



Marketing and Sales:

Werner Stenzig Jr.
Mobile: +34 639 700 148
Tel.: +34 934 677 691
e-mail: ws@solfluor.com



Commercial Administration:

Isabel Carrasco
Tel.: +34 934 678 064
Tel.: +34 934 677 691
e-mail: icarrasco@solfluor.e.telefonica.net



Customer Service and Logistics:

Maria Stenzig
Tel.: +34 971 707 896
Fax: +34 971 707 889
e-mail: 971707889@telefonica.net

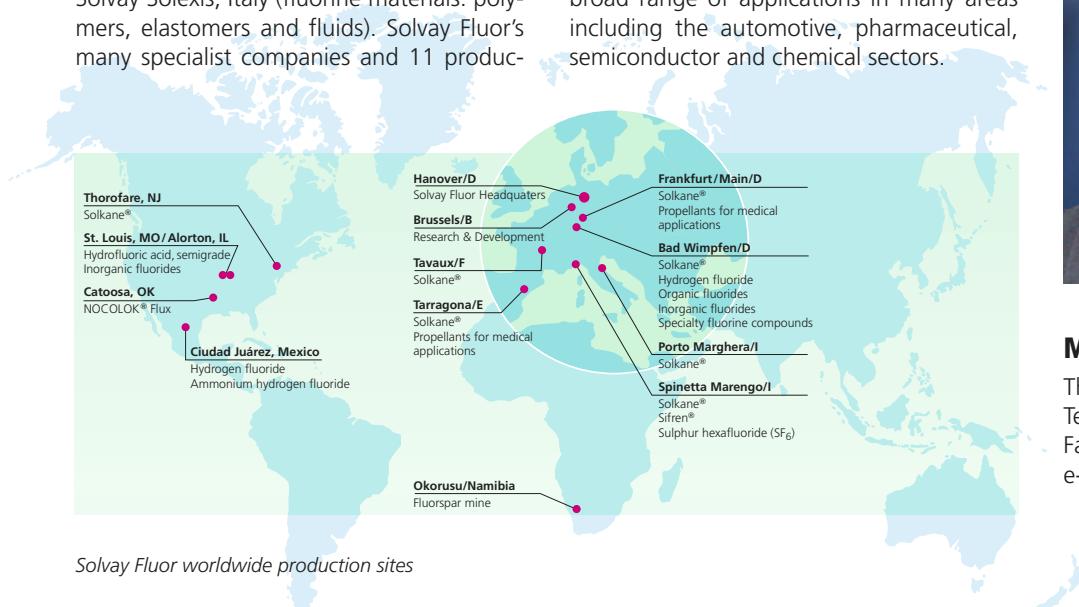


Solvay Fluor:

Company news

After the successful acquisition of Ausimont, Solvay Fluor – the name of the international Solvay Group's globally active Strategic Business Unit Fluoro-chemicals – now ranks second worldwide in this growing market together with its sister company, Solvay Solexis, Italy (fluorine materials: polymers, elastomers and fluids). Solvay Fluor's many specialist companies and 11 produc-

tion operations, including a fluorspar mine, are focused on the conversion of basic raw materials into hydrogen fluoride using Solvay core technology, and the further processing of this hydrogen fluoride into a wealth of valuable fluoro derivatives for a broad range of applications in many areas including the automotive, pharmaceutical, semiconductor and chemical sectors.



The Complete Range of Innovative Fluxes



NOCOLOK[®] Flux

Right to the point!

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Thomas Henkel boosts team in Hanover

Thomas Henkel joined the marketing team in December 2002 where his business skills will provide valuable input.



Marketing and Sales:

Thomas Henkel
Tel.: +49 511 857-2460
Fax: +49 511 857-2146
e-mail: thomas.henkel@solvay.com

Major interest in new flux application method

As an alternative to normal flux application, the use of NOCOLOK® Flux Binder systems ensures that the flux is always in the right place. This brings big advantages for selective flux application in specific areas in particular, as well as applying the flux to pre-assembled components, and reaching poorly accessible surfaces.

Selective flux coating

The condenser headers in Photo 2 are selectively spray-coated on specific surface areas only – in this particular case, in the header-to-block area. In Photo 1, the radiator headers are completely spray-coated on the air-side only. The pre-fluxing of selective surfaces is particularly useful for applying specific flux loads prior to component assembly. This reduces flux fall-off and dust formation. The binders are also helpful to pre-coat certain areas with specific flux loads.

The other main advantages of NOCOLOK® Flux Binder systems are the application of flux on internal surfaces and in critical areas

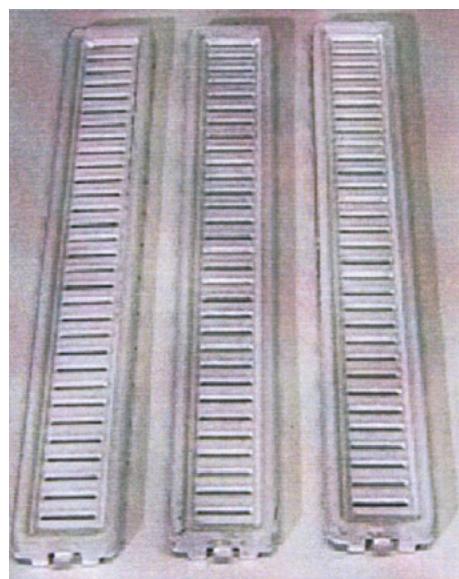


Photo 1: Pre-fluxed radiator headers (air-side).
NOCOLOK® Binder spray application

such as parts of components which are difficult to reach using standard flux application methods.

Improved flux adhesion properties

The binder systems improve the flux adhesion properties so there is less flux fall-off and less dust formation during handling and assembly of binder pre-fluxed parts.

Three concepts for flux binder applications:

1. NOCOLOK® Binder plus NOCOLOK® Thickener

Water-based mixtures are prepared following the instructions immediately before consumption to create agglomerate-free mixtures for the best coating results.

2. NOCOLOK® System Binder

NOCOLOK® System Binder (water-based) already contains the binder and thickener components as well as water. All that is required is the addition of NOCOLOK® Flux powder.

3. NOCOLOK® Flux plus Binder Mixture (water-based)

A ready to use mixture of NOCOLOK® Flux powder in a water-based slurry with a binder and a thickener added.

All NOCOLOK® Binder products from Solvay are water-based mixtures. The best and most uniform application process involves spraying with a suitable spray gun (1.4 mm – 1.6 mm) at approx. 3 – 5 bar. The surface temperature should be at least 10 °C.

Alternative techniques include dipping and brushing. Because of the very good wetting properties when applied by spraying, the flux slurry spreads out well to give uniform flux coverage after drying.

No surface discoloration

During the brazing cycle, these binders completely evaporate (mostly between 150 and 200 °C). When used according to the instructions, there are no interactions between the binder and the flux or between the binder and aluminium surfaces. Tests have shown that even at four times the standard flux load in a binder mixture, there is still no surface discoloration after brazing.

The recommended flux load when binders are used for flux application is the same as for the standard process (i.e. between 3 and 5 g/m²). The thickness of the binder coating is usually between 10 and 30 µm.

Drying can be carried out in air – approx. 15 – 20 minutes at room temperature for the coating surface – and 50 – 60 minutes before the parts can be handled. Oven and

forced convection drying is also possible and the parts will dry within 5 to 20 minutes at 50 – 80 °C.

Conclusions

NOCOLOK® Flux Binder systems are particularly advantageous for selective flux application in specific areas, as well as for pre-fluxing components prior to assembly, and fluxing poorly accessible surfaces. All of these advantages, and the fact that pre-coating can be carried out by sub-contractors, have captured the interest of the industry which is now increasingly using this innovative technique. NOCOLOK® Binder products are also suitable for flux types like NOCOLOK® Cs Flux, CsAlF complex or NOCOLOK® Sil Flux.

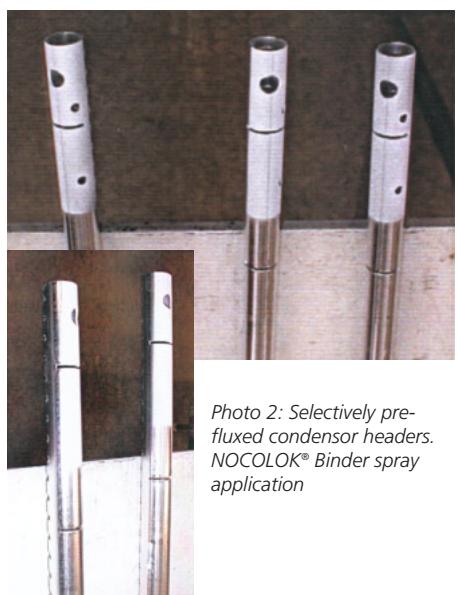


Photo 2: Selectively pre-fluxed condenser headers.
NOCOLOK® Binder spray application

NOCOLOK® NEWS

presents information for NOCOLOK® users.

Publisher:

Solvay Fluor und Derivate
GmbH & Co. KG, Hanover
www.solvay-fluor.com

Editorial:

Solvay Fluor und Derivate
GmbH & Co. KG, Department FD-KN
e-mail: werner.schmitt@solvay.com

Production:

Ahlers Heinel Werbeagentur,
Hanover
www.ahlersheinel.de

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**Solvay
Fluor**



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Brazing events 2003

- **VTMS6**
Brighton, Great Britain
May 18 – 21
- **EABS Brazing Seminar**
Hannover, Germany
September 3–4
- **IKK Refrigeration Exhibiton**
Hannover, Germany
October 8–10
- **8th Annual International Aluminium Brazing Seminar AFC**
Holcroft, USA
October