

Technical Information Leaflet

XV1300 Series

UV Curing Single Pack Notation Inks

PRODUCT REFERENCE

XV1300	UV Single Pack Legend Ink White	CFSN6022
XV1300	UV Single Pack Legend Ink White	CFSN6047
XV1300	UV Single Pack Legend Ink Yellow	CFSN6025
XV1300	UV Single Pack Legend Ink Black	CFSN6028

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ISO9001

ISO14001

RoHS & WEEE Directive Compliant

1) DESCRIPTION

XV1300 Series inks are high definition screen printing legend inks suitable for use over UV solder resists and many types of base laminate material. They are designed to give rapid cure when exposed to ultra violet radiation.

XV1300 legend inks will withstand most soldering and flux cleaning operations.

XV1300 inks are available in white, yellow, and black.

This Technical Information Leaflet (TIL) and the relevant Material Safety Data Sheet (MSDS) should be read carefully prior to using this product.

2) MIXING AND THINNING

XV1300 inks are single pack 100% solids inks which are supplied ready for use, and should not require thinning.

N.B. The ink should be stirred well before use.

3) PRE-CLEAN

When printing over base laminate material, it is essential that the surface is free from oil and grease. Any contamination should be removed with organic solvents. Certain grades of laminate have very smooth surfaces and light brushing may be required to improve adhesion.

No preparation is required when printing over Sun Chemical Circuits UV solder resists.

4) APPLICATION

XV1300 Series inks should be printed through a 100 - 120 threads/cm. (255 - 305 T/inch) polyester mesh. Coarser meshes will deposit a thicker film, which may prove difficult to cure, causing loss of resistance properties and adhesion.

Direct/indirect photographic stencils and a polyurethane squeegee with a shore hardness of 60 - 65 are recommended.

All screens, squeegees, and other equipment must be cleaned and thoroughly dried before use and be free from residues of screen cleaner and ink.

5) WASHING UP

Screen Cleaner XZ46 is recommended for washing up.

Alternative cleaners and screenwashes are available to suit customers' particular requirements. Your local Sun Chemical Circuits representative will be pleased to advise on product selection.

6) UV CURING

A UV curing unit with 2 x 200 W/inch (80W/cm.) medium pressure mercury vapour lamps is recommended. Recommended cure levels are as follows:-

- XV1300 White 3.0 - 4.5 J/cm².
- XV1300 Yellow 3.5 - 4.5 J/cm².
- XV1300 Black 3.5 - 4.5 J/cm².

7) RESISTANCE

A fully cured ink will resist most mass soldering techniques, flux removal systems and all general solvents used in board materials.

Please note that XV1300 White is not suitable for nickel gold plating processes.

8) STORAGE AND SHIPPING

When stored in sealed containers, in a cool place (20°C / 68°F), away from sources of direct heat and sunlight, XV1300 Series inks have a shelf life of 18 months.

9) HEALTH AND SAFETY

Detailed material safety data sheets will be supplied by your local Sun Chemical Circuits representative.

The products detailed hereon have been tested in accordance with, and meet the requirements of, the RoHS Directive 2002/96/EC and the European Directive 2003/11/EC, regarding the presence of the metals - Pb (Lead / Lead compounds), Hexavalent Chromium, Cd (Cadmium), Hg (Mercury), and Poly Brominated Flame Retardants.

The materials detailed above are present below the specified maximum limits.

10) PACKAGING

XV1300	UV Single Pack Notation Ink White	1.00 kg.	CFSN6022
XV1300	UV Single Pack Notation Ink White	1.00 kg.	CFSN6047
XV1300	UV Single Pack Notation Ink Yellow	1.00 kg.	CFSN6025
XV1300	UV Single Pack Notation Ink Black	1.00 kg.	CFSN6028
XZ46	Screen Cleaner	5.00 L.	CDSN4008

11) DISCLAIMER

This information has been carefully compiled from experience gained in field conditions and extensive laboratory testing. However the products' performance and its' suitability for the customers' purpose depend on the particular conditions of use and the material being printed. We recommend that customers satisfy themselves that each product meets their requirements in all respects before commencing a production run. Since we cannot anticipate or control the conditions under which our products are used, it is impossible to guarantee their performance. All sales are also subject to our standard terms and conditions.

12) SUPPORT

Sun Chemical Circuits are an international company, and as such can offer technical, engineering and sales support to our customers worldwide. If you require more information regarding this product, or any of our extensive range of materials for PCB fabrication, please contact our local sales offices.