

Series

SCREEN PRINTING HARDENER

Main features

XFH-N Green:

Transparent liquid slightly opaline

This hardener has a free monomer diisocyanate content below 0,1%

- . No yellowing
- . Low viscosity
- . 100% of dry residue
- . It does not solvents, so it is VOC free
- . Long pot-life
- . Very low content of free monomer
- . Transparent aspect

XFH:

Aromatic multipurpose hardener, limpid transparent and straw-coloured, it is used for the preparation of polyurethane, air-dried, two-component inks.

XFH-N:

Aliphatic multipurpose hardener, limpid, transparent, it is used for the preparation of polyurethane, air-dried, two-component inks.

XFH-N-00:

Aliphatic multipurpose hardener to 100%, free of solvent, limpid, transparent, it is used for the preparation of one or two component inks that dried at room temperature. Recommended for series mentioned in attached table.

The dosage of XFH-N-00 is lower in comparison of the others hardeners, in this case the printed ink result more opaque.

XFH-GL:

Silane diamine-functional hardener, limpid, liquid and transparent, it is used for the preparation of two-component inks. Recommended for epoxy inks, that have to adhere on inorganic surfaces.

XFH-GL-02:

Hardener which must be used with acid-cured XFA series.

Multifunctional hardener in solution with glycol ether solvent, which also acts as an adhesion promoter and antistatic.

Liquid and clear aspect, yellowish in color.

PH 2 at 20 ° C.

Typical smell of ester.

XFH-GL-02 hardener must be stored in the original can in a cool and frost-free place, away from direct sunlight.

XFH-GL-03:

Hardener which must be used with acid-cured XFA series.

Organic compound in solution with Butyl Alcohol.

Strong acid used as a catalyst for crosslinking reactions.

Liquid and clear aspect, yellowish in color.

Typical smell of butyl alcohol.

XFH-GL-03 hardener must be stored in the original can in a cool and frost-free place, away from direct sunlight.

XFH-S:

Hardener which must be used with SK series.

SK hardener is a functional silicone fluid, containing a high percentage of reactive Si-H groups.

High reactivity.

Low volatility.

Free of solvents, halogens and heavy metals.

Liquid and colorless aspect.

SGH:

Transparent hardener, made up by modified cycloaliphatic amine

- . low viscosity
- . great surface appearance
- . good solidity to redness
- . good mechanical performance

Polymerization at room temperature.

SGH hardener is slightly hygroscopic and it must be stored at room temperature and in conditions without humidity, in closed cans.

In these conditions, it has a pot life of 1 year approx.

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Outdoor resistance

XFH-N Green:
Non-yellowing and suitable for objects which must be exposed outdoors.

XFH:
It tends to yellowing. Not suitable for outdoor application.

XFH-N:
It does not tend to yellowing. Suitable for outdoor application.

XFH-N-00:
It does not tend to yellowing. Suitable for outdoor application.

XFH-GL:
Good resistance to yellowing. Not suitable for outdoor application.

XFH-GL-02:
Good resistance to yellowing. Suitable for a not prolonged outdoor use.

XFH-GL-03:
Good resistance to yellowing. Suitable for a not prolonged outdoor use.

XFH-S:
It does not tend to yellowing. Suitable for outdoor application.

SGH:
It does not tend to yellowing. Suitable for outdoor application.

Drying process

XFH-N Green:
Curing time depends on the ink it is mixed with.
Heat helps to speed up the process.
In almost all the systems used, pot-life is around 8-9 working hours and depends on the environmental conditions.
High humidity reduces the pot-life.

XFH:
Polymerization starts at about 10°C.

XFH-N:
Polymerization starts at about 20°C.

XFH-N-00:
Polymerization starts at about 20°C.

XFH-GL:
It can polymerize by air or in warm-air circulation furnace at a maximum temperature of 120-130°C for about 5-10 minutes.

XFH-GL-02:
The pot-life of XFA series mixed with XFH-GL-02 hardener at room temperature and low humidity is about 2 weeks.

XFH-GL-03:
The pot-life of XFA series mixed with XFH-GL-03 hardener at room temperature and low humidity is about 2 weeks.

XFH-S:
The SK series mixed with XFH-S hardener only polymerizes at the following temperatures and within the pre-established times:
130°C for 7-8 minutes / 160°C for 3-5 minutes / 180°C for 2-3 minutes.

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SGH:

Polymerization time depends on the ink it is mixed with.
Heat helps to speed up the process.

Mechanical and chemical solidity
XFH-N Green, XFH, XFH-N and XFH-N-00:

When mixed with inks, these hardeners give excellent solidity to chemical agents and excellent mechanical solidity depending on the polymer they react with.

XFH-GL:

Excellent water resistance.

When mixed with inks, this hardener gives excellent solidity to chemical agents and excellent mechanical solidity depending on the polymer they react with.

XFH-GL-02 and XFH-GL-03:

When mixed with XFA series, these hardeners give excellent solidity to chemical agents and excellent mechanical solidity.

XFH-S:

When mixed with SK series, it gives excellent adhesion and excellent mechanical solidity.

SGH:

Mixed with SERI-GLASS series, it gives great solidity to the chemical agents and great mechanical solidity.

Recap

SERIES	TYPE	HARDENER	QUANTITY	NOTE
H	one and two-component	XFH-N Green	5%	for outdoor applications. isocyanate content < 0,1%
		XFH	10%	
		XFH-N	10%	better elasticity and fastness for outdoor application
HP	one and two-component	XFH-N Green	5%	for outdoor applications. isocyanate content < 0,1%
		XFH	10%	
		XFH-N	10%	
HP-C	one and two-component	XFH-N Green	5%	for outdoor applications. isocyanate content < 0,1%
		XFH	10%	
		XFH-N	10%	for outdoor applications
HV	one and two-component	XFH-N Green	5%	for outdoor applications. isocyanate content < 0,1%
		XFH-N	10%	
LE	one and two-component	XFH-N Green	6%	for outdoor applications. isocyanate content < 0,1%
SERI-GLASS	two-component	SGH	10%	
SK	two-component	XFH-S		see notes below
TU-MC	two-component	XFH-N Green	8%	for outdoor applications. isocyanate content < 0,1%
		XFH-N	17%	
		XFH-N-00	12%	(concentrate)

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TU-PP	one and two-component	XFH-N Green	8%	for outdoor applications. isocyanate content < 0,1%
		XFH	10%	
TU-R	one and two-component	XFH-N Green	8%	for outdoor applications. isocyanate content < 0,1%
		XFH-N	10%	
		XFH-N-00	8%	
UVA	one and two-component	XFH-N Green	5%	for outdoor applications. isocyanate content < 0,1%
		XFH	5%	10% max
UVA LED	one and two-component	XFH-N Green	5%	for outdoor applications. isocyanate content < 0,1%
		XFH	5%	10% max
UVB-E	one and two-component	XFH-N Green	5%	for outdoor applications. isocyanate content < 0,1%
		XFH	5%	10% max
UV-GL	two-component	XFH-GL	5%	
UV-GL LED	two-component	XFH-GL	5%	
UV-M	one and two-component	XFH-N Green	5%	for outdoor applications. isocyanate content < 0,1%
		XFH	5%	10% max
VY-01	one and two-component	XFH-N Green	5%	for outdoor applications. isocyanate content < 0,1%
		XFH	10%	
		XFH-N	10%	for outdoor applications
XF	two-component	XFH-N Green	10%	for outdoor applications. isocyanate content < 0,1%
		XFH	25%	
		XFH-N-00	14%	
XFA	two-component	XFH-GL-02 lento	10%	
		XFH-GL-03 rapido	10%	(7% in the case of overprints)
XF-DD	two-component	XFH-N Green	17%	for outdoor applications. isocyanate content < 0,1%
		XFH-N	33%	pot-life 6-8 hours
		XFH-N-00	20%	
XFE	two-component	XFH-N Green	12%	for outdoor applications. isocyanate content < 0,1%
		XFH-N-00	14%	
		XFH-GL	9%	
XF-GL	two-component	XFH-GL	5%	
XFM	one and two-component	XFH-N Green	5%	for outdoor applications. isocyanate content < 0,1%
		XFH	10%	
		XFH-N	10%	for outdoor applications

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XFP	two-component	XFH-N Green	13%	for outdoor applications. isocyanate content < 0,1%
XF-PVC	one and two-component	XFH-N Green	5%	for outdoor applications. isocyanate content < 0,1%
		XFH	10%	
		XFH-N	10%	for outdoor applications

STORAGE:

Please keep the cans in a dark place, at temperature of 15-25°C.

If the recommended temperature is higher than the suggested one or the cans are not completely closed, the shelf life and the qualities are drastically reduced.

CLASSIFICATION:

Before using this ink, consult the relevant safety data sheets available.

The safety data sheets provided comply with the REACH regulation (EC 1907/2006).

The hazard classification and related labelling are compliant with the CLP / GHS regulation (EC 1272/2008).

OTHER INFORMATION:

For more information on SERICOM ITALIA srl products, refer to the website www.sericom.it

NOTE:

Our technical consultancy activity, carried out orally, in writing or through tests or experiments, takes place on the basis of our best knowledge.

However, the same must be considered as information without any binding value, also as regards any third party industrial property rights.

This does not exempt the customer from performing his own checks on the products supplied by us in order to estimate the suitability or otherwise of the procedures and for the purposes intended.

The application, use and transformation of the products take place outside our control possibilities and therefore fall under the exclusive responsibility of the customer.