SOLDER WIRE TYPE KRISTALL 600 (FAIRTIN)

Flux-cored solder wire, No-Clean, REL0.

DESCRIPTION

The Kristall 600 flux system has been designed for manual soldering and rework. Due to its optimised properties, the flux system is also suitable for automated soldering processes. The modern activator system of the flux ensures, despite the fact that it is low activated, a good, fast and safe wetting. This solder wire can be used on all clean metallic surfaces with low oxidation levels, which are used in today's electronic manufacturing. It leaves minor amounts of clear, transparent and electrical safe residues.

The Kristall 600 flux is based on synthetic resins. This flux is halide-zero and colophony-free and classified as REL0 according to J-STD-004B.

Stannol Kristall 600 provides fast soldering on copper and brass surfaces as well as on pre-tinned surfaces. The good thermal stability of Stannol Kristall 600 makes this flux perfect for usage with all lead-free alloys. The resin and flux systems are designed to leave relatively low residues and to minimise residual activity.

To use all the advantages of the Stannol product range we provide the Kristall 600 in the alloys FLOWTIN and SN100C, which are produced exclusively with FAIRTIN.
For FAIRTIN alloys only tin is used by manufacturers, who particularly respect the protection of the environment during ore mining and processing, respect national and international rights and fulfill their social responsibilities (please see www.fairtin.com for more information).
By using micro additives in FLOWTIN and SN100C, the solder tips are protected during soldering. This will extend the life time of your tools and helps saving money considerably.

CHARACTERISTICS

The optimised resin matrix and innovative halide-free activator combination of the Kristall 600 solder wire offers a range of advantages compared to conventional halide-free solder wires:

- **Low flux spitting**
- **Good wetting properties**
- **Transparent residues**
- **Electrical safe residues**
- **No-Clean, REL0 classification**

Thanks to its low tendency of spitting, transparent residues and high thermal capacity, the Kristall 600 produces very clear residues around the solder joints.

APPLICATION

The Stannol Kristall 600 solder wire is suitable for both manual and machine soldering of electrical and electronic components. The flux residues do not need to be removed. Solder tip temperatures should be set to 120/140K above the melting point of the used alloy, i.e. when using TC Sn99.3Cu0.7 with a melting point of 227°C you can solder with ~340-360°C at the tip, if thermal management is appropriate for the specific application.
If cleaning is required for optical or technical reasons, use Stannol Flux-Ex 200/B.

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PHYSICAL PROPERTIES AND DATA

GENERAL PROPERTIES	Kristall 600
Flux type (J-STD-004B):	REL0
Flux content (EN12224):	2.2-3.5%, depending on application
Halide content:	0.0%
Corrosion effect (J-STD-004B, IPC-TM-650, 2.6.15):	None
Surface insulation resistance (J-STD-004B, IPC TM 650 2.6.3.3):	$>10^8\,\Omega$
Alloys according to ISO 9453:2014	**LEAD-FREE**
	FAIRTIN SN100C Sn99.3Cu0.7NiGe (alloy 403)
Alloys according to ISO 9453:2014 with micro-alloy additives <0.05%	**LEAD-FREE (FLOWTIN SERIES)**
	FAIRTIN Flowtin TC Sn99.3Cu0.7
	FAIRTIN Flowtin TSC305 Sn96.5Ag3.0Cu0.5
Available diameters:	0.3/0.5/0.7/0.8/1.0 as standard
Available reel sizes:	500 g, 1 kg

*The listed alloys, diameters and packaging units are informative. Other combinations can be made available upon request, minimum order quantities may apply.

HEALTH & SAFETY

Prior to use, please read the safety data sheet and take all necessary safety precautions. Soldering will create always visible fuming. In all cases, fumes from soldering operations must be removed from the breathing zone of operators.

NOTICE