# SOLDER WIRE TYPE KRISTALL 600 SERIES
(Fairtin)

Flux-cored solder wire, No-Clean

## PRODUCT DESCRIPTION

The flux systems of the Kristall 600 series were developed for manual soldering and rework. Due to their optimised properties, the flux systems are also suitable for automated soldering processes. The modern activator systems of the flux ensures, despite the fact that it is low activated, a good, fast and safe wetting. These solder wires can be used on all clean metallic surfaces with low oxidation levels, that are used in today's electronic manufacturing. They leave minor amounts of clear, transparent and electrical safe residues.

The flux systems of the Kristall 600 series are based on synthetic resins. These fluxes are colophony-free.

Stannol Kristall 600 series provides fast soldering on copper and brass surfaces as well as on pre-tinned surfaces. The good thermal stability of Stannol Kristall 600 series makes these fluxes 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 series 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 mining and processing, respect national and international rights and fulfil their social responsibilities.

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.

## 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:**

- **according to J-STD-004C**
- **low flux spitting**
- **good wetting properties**
- **transparent residues**
- **electrical safe residues**
- **No-Clean**

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


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## APPLICATION

The Stannol Kristall 600 series solder wires are 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.

## PHYSICAL PROPERTIES AND DATA

| GENERAL PROPERTIES | Kristall 600 | Kristall 605 | Kristall 611 |
|---|---|---|---|
| Flux type (J-STD-004C) | **REL0** | **REL1** | **REM1** |
| Flux content Standard | 2.5% | 2.5% | 2.5% |
| Halide content | **0,0%** | **<0,5%** | **<1,1%** |
| Corrosion effect (J-STD-004B, IPC-TM-650, 2.6.15) | **PASS / L** | **PASS / L** | **PASS / M** |
| Surface insulation resistance (J-STD-004C, IPC TM 650 2.6.3.3) | **PASS / >$10^8$ Ω** | **PASS / >$10^8$ Ω** | **PASS / >$10^8$ Ω** |
| ECM-Test (J-STD-004C, IPC TM 650 2.6.14.1) | **PASS / F50≥I50/10** | **PASS / F50≥I50/10** | **PASS / F50≥I50/10** |
| Alloys according to ISO 9453 | **LEAD-FREE** | | |
| | **FAIRTIN SN100C** Sn99.3Cu0.7NiGe (alloy 403) | | |
| Alloys according to ISO 9453 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.

## CLEANING

If cleaning is required for optical or technical reasons, the residues can be removed using conventional cleaning processes. The Stannol cleaner Flux-Ex Post is recommended for cleaning.

## HEALTH & SAFETY

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

## DISCLAIMER




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