

Technical Product Information

ELSOLD Lead-free Solid Solder Wires

TAMURA ELSOLD manufactures a wide range of lead-free solid solder wires, which relieve the change to lead-free soldering processes, for manual and automated iron soldering processes with spate flux supplying and machined wave soldering processes with wire supplying. By the use of high purity raw materials and optimized processes sequences, adjusted to the required product properties, an outstanding quality of solid solder wires is reached.

Area of Applications of ELSOLD Solid Solder Wires

- Telecommunication, industrial electronics, automotive electronics, consumer electronics, electromechanics
- Selective soldering and manual soldering

ELSOLD Standard Alloys

Tin-Silver Alloys: ELSOLD SA

Trade Name	Sn [%]	Ag [%]	Density [g/cm ³]	Melting point/range [°C]
ELSOLD SA30	97 ± 0,5	3.0 ± 0.2	7.34	221 – 232
ELSOLD SA35	96.5 ± 0.5	3.5 ± 0.2	7.35	221
ELSOLD SA38	96.2 ± 0.5	3.8 ± 0.2	7.36	221 – 238
ELSOLD SA50	95 ± 0.5	5 ± 0.2	7.39	221 – 240

Tin-Silver-Copper Alloys: ELSOLD SAC

Trade Name	Sn [%]	Ag [%]	Cu [%]	Density [g/cm ³]	Melting point/range [°C]
ELSOLD SAC305	96.5 ± 0.5	3.0 ± 0.2	0.5 ± 0.2	7.37	217 – 219
ELSOLD SAC3507	95.8 ± 0.5	3.5 ± 0.2	0.7 ± 0.2	7.40	217 – 219
ELSOLD SAC3807	95.5 ± 0.5	3.8 ± 0.2	0.7 ± 0.2	7.40	217

Tin-Copper Alloys: ELSOLD SC

Trade Name	Sn [%]	Cu [%]	Density [g/cm ³]	Melting point/range [°C]
ELSOLD SC07	99.3 ± 0.5	0.7 ± 0.2	7.32	227
ELSOLD SC30	97.0 ± 0.5	3.0 ± 0.2	7.35	230 – 250

Micro-alloyed Solders: SN100 MA und SN100 MA-S

Trade Name	Sn [%]	Ag [%]	Cu [%]	Others	Melting range [°C]
ELSOLD SN100(Ag)MA	Rest	0/ 0.3/ 3.0	0.7/ 0.5 ± 0.2	Co, Ni, Ce	217 – 227
ELSOLD SN100(Ag)MA-S	Rest	0/ 0.3/ 3.0	0.7/ 0.5 ± 0.2	Ni, Ge, P	217 – 227

Alloy tolerances, if not stated otherwise, for elements and impurities per EN 61190-1-3 / ISO 9453

Other alloys can be manufactured on special request.

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Diameter and Tolerances (per EN ISO 12224-1)

Diameter [mm]	0.3	0.5	0.75	1.0	1.5	2.0	3.0	5.0
Tolerances [mm]	± 0.03	± 0.05	± 0.05	± 0.05	± 0.05	± 0.05	± 0.1	± 0.1

Packaging Units

Spools 250 g / 500 g / 1000 g / 2.5 kg / 4 kg / 5 kg / 10 kg

Neon Yellow: 250 g / 500 g / 1000 g

Black: 2.5 kg / 4 kg / 10 kg

Wood: 5 kg

Spool Dimensions [mm]

	250 / 500 g	1000 g	2.5 kg	4 kg
Flange Diameter	69.5	70	100	125
Barrel Diameter	33.5	33	50	80
Bore	30	30	16	16
Total Width	41.5	78	100	125
Traverse Width	38	68	80	100

Shelf Life

The material has a nearly a virtually unlimited shelf life. It should be stored in a cool, dry and clean environment. The minimum shelf life is 5 years under recommended conditions.

Safety and Health

For safety and health information please refer to the relevant material safety data sheets.

Important information: The above information was put together based on the data available to the producer at the time of print. The technical data contained herein are consistent with the properties of the material but should not be used for the preparation of specifications as it is intended for reference only.