

Technical Product Information

Flux-Cored Solder Wire Type C3+

Flux classification DIN EN 61190-1-1: ROL0
Flux content versions available: 1.5 % - 2.0 % - 2.5 % - 3.5 %

TAMURA ELSOLD flux type C3+ is based on a modified rosin with a special L0 activator system on the basis of dicarboxylic acids. A standard flux content version of 2.5% has been selected for lead-free soldering. Other flux content versions are available for special applications. Flux type C3+ is a "no-clean" flux and the residues can remain on the solder joints in most cases.

TAMURA ELSOLD Lead-Free Alloys:

Alloy	Sn [%]	Ag [%]	Cu [%]	Sb [%]	Density [g/cm ³]	Melting Range [°C]
SC07	99.3		0.7		7.32	227
SAC0307	99.0	0.3	0.7		7.33	217 – 227
SA35	96.5	3.5			7.35	221
SAC305	96.5	3.0	0.5		7.37	217 – 219
SAC3507	95.8	3.5	0.7		7.40	217 – 219
Sn95Sb5	95.0			5.0	7.25	230 – 240

TAMURA ELSOLD SN100(Ag) MA-S

TAMURA ELSOLD SN100(Ag) MA-S alloys contain the micro-alloying elements Nickel, Germanium and Phosphor. Additionally they are produced in a special process, called 'freshening'. This proprietary technique results in a highly pure and highly stable solder alloy with a much lower tendency to oxidize during soldering. Both the Sn-Cu alloy SN100 MA-S (SC07) and silver containing alloys SN100Ag0,3 MA-S (SAC0307), SN100Ag1 MA-S (SAC107) and SN100Ag3 MA-S (SAC305) are available.

	ELSOLD SN100 MA-S	ELSOLD SN100Ag0,3 MA-S	ELSOLD SN100Ag1 MA-S	ELSOLD SN100Ag3 MA-S
Composition [wt.-%]	Sn	99.3	99.0	98.3
	Ag		0.3 ± 0.2	1.0 ± 0.2
	Cu		0.7 ± 0.2	0.5 ± 0.2
	Ni		0.03-0.06	
	Ge		0.003-0.007	
	P		0.001-0.005	
Melting range [°C]	227-230	217-227	217-223	217
Density [g/cm ³]	7.32	7.33	7.36	7.38

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ELSOLD Lead bearing alloys:

Alloy	Sn [%]	Pb [%]	Ag [%]	Cu [%]	Density [g/cm ³]	Melting Range [°C]
Sn60Pb40	60	Rest			8.5	183 – 190
Sn60Pb39Cu1	60	Rest		1.2-1.6	8.5	183 – 190
Sn62Pb36Ag2	62	Rest	2		8.4	178 – 180
Sn60Pb36Ag4	60	Rest	4		8.5	178 – 180
Sn63Pb37	63	Rest			8.4	183

Alloys correlate to DIN EN ISO 9453; Tolerances: for content > 5 %: ± 0.5 %; for ≤ 5 %: ± 0.2 %

Packaging / Spools / Diameters

Spools: 500 g, 1000 g

Standard Diameter

Color Code

Lead bearing alloys:	green	0.30 ± 0.03 mm	1.00 ± 0.05 mm
Lead-free alloys:	neon-yellow	0.50 ± 0.05 mm	1.20 ± 0.05 mm
		0.75 ± 0.05 mm	1.50 ± 0.05 mm

Shelf Life

We guarantee a minimum shelf life of 36 months if the material is properly stored in a clean environment. Most likely, TAMURA ELSOLD cored wires can be used without problems long beyond this period. However, the user should find this out by making appropriate test before using the solder.

Safety and Health

For advises concerning safety and health please see the material safety data sheet.

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.