



E-Qual Lowsac Type Y Lead Free Solder

- Low-Cost Tin/Silver/Copper Solder
- Reduced Drossing
- Better Reliability than Sn/Pb
- Less Dense, more joints per kilo (compared to tin/lead)

Formulated as an economic lead free alternative to traditional tin/lead solders for use in modern assembly, to give a balance of cost against performance. This alloy may not be suited to all mass production environments.

Compliance Table

Typical Analysis Lowsac Type Y	Suggested Levels	
Tin	Balance	98-99.0%
Silver	0.30%	0.20 – 4.0%
Copper	0.70%	0.6-1.0%
Arsenic	<0.001%	0.03% max
Gold	<0.001%	0.05% max
Bismuth	0.01%	0.04% max
Cadmium	<0.001%	0.003% max
Iron	<0.001%	0.01% max
Nickel	<0.001%	0.003% max
Zinc	<0.001%	0.003% max
Lead	<0.001%	0.10% max
Antimony	0.03%	0.10% max

Recommended Operating Conditions

E-Qual Lowsac Type Y solder is suitable for use in dynamic and turbulent solder wave systems.

The optimum temperature range for operation of the solder bath is 265°C ± 10°C.

To ensure the continued optimum performance of E-Qual Lowsac Type Y solder in your manufacturing process it is important that periodic analysis of the solder bath contents is undertaken to verify that the alloy composition is maintained within strict limits. Any build-up of undesirable impurity elements or an increase in the copper content may lead to poor flow characteristics and non-ideal solder joint structure, with a consequent rise in defect rates. Your distributor will be pleased to discuss with you details of our analysis programme.

Technical Specifications

Property	Value
Solidus	217°C
Liquidus	228°C
Density	7.33grm/cc
Hardness (Hv)	14.1

Manufacturing Control

All E-Qual Lowsac Type Y bar solders are made with fully traceable batches of virgin metals within a Quality Management System that has been approved to BS EN ISO9001 2000 and Environmental Management System approved to BS EN140001. Samples are retained from every batch of solder for a minimum three year period.

Availability

STYLE	NOM. WEIGHT	DIMENSIONS	PACKING
Bar	1kg	300 x 32 x 12mm	20kg Carton
Autofeed Ingot	4kg	500 x 45 x 33mm	4.5kg
Chunks	-	-	15kg Carton

Please contact your distributor with any specific non standard bar or ingot size to check on availability.

Health and Safety

Warning:

The following information is for guidance only and users must refer to the Material Safety Data Sheets relevant to E-Qual Lowsac Type Y solder products before use.

Protection and Hygiene:

Eating, drinking and smoking should not be permitted in the working area. Hands should be washed with soap and warm water after handling solder, especially before eating.