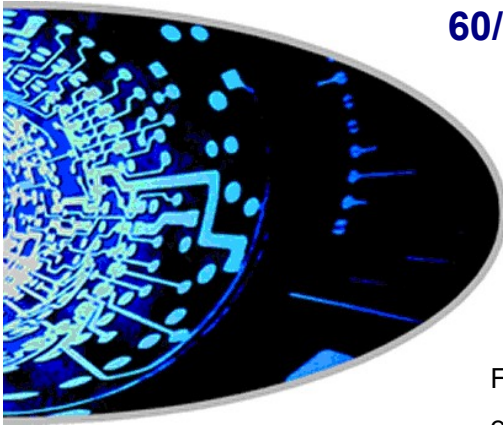


60/40 SMQ SURFACE MOUNT QUALITY SOLDER



From the beginning DKL Metals Ltd have been committed to offering the electronic assembly market ultra-high purity solders and consumables, on-time and at competitive prices. In keeping with this policy we are pleased to introduce our **E-Qual SMQ** (Surface Mount Quality) solder bar thus setting even higher standards of purity and performance.

Benefits

- Consistent, clean well formed joints
- High yields, low production costs
- Reduction in icicing and bridging
- Low fillets
- Reduced product usage and machine maintenance
- Meets or exceeds all Internationally recognised Standards
- Optimum performance and batch consistency

All **E-Qual** solders are manufactured from high grade refined virgin metals and, by means of a special anti-drossing treatment during manufacture will show a marked reduction in dross formation in all assembly situations.

Compliance

Element		Typical E-Qual SMQ %	ISO 9453 Alloy 104	ISO 9453 Alloy 103	Max. Rec. in use
Tin	Sn	60.0	59.5-60.5	59.5-60.5	N/A
		%max	%max	%max	%max
Antimony	Sb	0.02	0.05	0.20	0.20
Copper	Cu	0.0005	0.05	0.05	**0.25
Zinc	Zn	0.0002	0.001	0.001	0.002
Iron	Fe	0.001	0.02	0.02	0.01
Arsenic	As	0.002	0.03	0.03	0.01
Nickel	Ni	0.001	***	***	0.01
Bismuth	Bi	0.01	0.05	0.10	0.01
Cadmium	Cd	0.0002	0.002	0.002	0.002
Silver	Ag	0.001	***	***	***
Gold	Au	0.001	***	***	**0.25
Aluminium	Al	0.0001	0.001	0.001	0.002
			*0.08	*0.08	

*= Sum of all impurities except Sb, Bi and Cu
 **= Combined total
 ***= Not specified



Quality Control and Analysis

All **E-Qual** solder alloys are manufactured in accordance with our Quality Management System. In February 1991 DKL Metals were amongst the first in the industry to gain third party accreditation for their Quality Management System, which was then BS 5750 Part 2. DKL has continued to maintain and update their QMS in line with the changing requirements of the Quality Standard. Strict quality control procedures are undertaken at every stage of manufacture. Each bar is marked at the time of moulding, with both grade of solder and the unique batch number. This allows for complete and accurate batch make-up and analysis details to be retained for every bar produced. Unlike many solder alloy producers we offer a free regular solder analysis service for a check on bath contamination levels. We will also give advice on contamination levels to ensure that the quality of your solder is maintained within strict operating parameters.

Economy








E-Qual solders are always competitively priced, however the initial purchase price is not the only governing factor with regards to economy; the rate of dross formation can vary greatly from alloy to alloy thus considerable material may be lost in this way. By means of a special anti-drossing treatment during the manufacturing stage **E-Qual** solders will show a marked reduction in the rate of dross formation when compared to untreated material. Such treatment is effective for some time during the solder's use and provided top-up material is **E-Qual**, then continued good results are obtained. Nonetheless, even **E-Qual** solder inevitably does produce some dross, and in order to assist with handling/safety regulations, dross containers with re-sealable lids are available to our customers, free of charge.

Solder Wire

We offer a wide range of **E-Qual** solder wires in both cored and solid form, which are completely compatible with our **E-Qual** solders and fluxes. These are available as standard resin cored, low-solids, halide-free synthetic resin cored and water washable wires in a wide range of diameters for virtually all applications. Separate data sheets are available on request.

Fluxes

We have a comprehensive range of fluxes, cleaners, thinners and additives for most assembly applications. We would be pleased to discuss your specific requirements and supply appropriate data sheets as necessary.

FORMS	STYLE	NOMINAL WEIGHT	DIMENSIONS/ DIAMETERS	STANDARD PACKING
	Autofeed Ingot	5kg	500 x 45 x 33mm	5kg
	Autofeed Ingot	2kg	330 x 45 x 15mm	24kg Carton
	Bar	1kg	300 x 32 x 12mm	25kg Carton
	Bar	500g	505 x 22 x 6mm	25kg Carton
	Chunks	-	-	15kg Carton
	500g Reel	500g	3.5mm – 0.5mm	10kg Carton
	3kg Reel	3kg	3.5mm – 0.7mm	12kg Carton

Packaging

Special packaging arrangements, particularly for export orders can be accommodated on request.

The information given in this technical data sheet is to the best of our knowledge accurate. It is intended to be helpful but no warranty is expressed or implied regarding the accuracy of such data. It is the users responsibility to determine the suitability of his own use of the product described herein: and since conditions of use are beyond our control, we disclaim all liability with respect to the use of any material supplied by us. Nothing contained herein shall be construed as permission or as recommendations to practice any patented invention without a license from the patent owner nor as recommendation to use any product or to practice any patented invention without a license from the patent owner nor as recommendation to use any product or to practice any process in violation of any law or any government regulations.

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