



P40™ – Soft Soldering Alloy

Johnson Matthey's P40™ is a 4% silver-tin soft soldering alloy. P40™ has excellent soldering characteristics and offers a number of advantages over conventional tin-lead alloys. It provides improved strength characteristics particularly where service at moderately elevated temperatures is a factor.

Being lead free, P40™ may be used in plumbing installations, particularly where soft water is in use. P40™ is widely used in food handling equipment where lead contamination must be avoided.

P40™ is a good colour match on stainless steel and the resulting joints are not prone to interfacial (crevice) corrosion. The optimum joint gap for P40™ is 0.075mm.

Composition:	4% Ag, 96% Sn
Specification:	BS EN ISO 9453:2006 S-Sn96Ag4 – Alloy No. 701
Melting range:	221°C

Uses for This Product

P40™ is commonly specified for industrial soldering operations. For example it is used for soldering food-handling equipment, in plumbing installations, for components carrying water and for stainless steel parts.

Conditions for Use

With the correct choice of flux this alloy will join copper and copper alloys, carbon steels and stainless steels. P40 can be supplied in a solid form and in this case a suitable flux should be selected from the list below.

Flux	Recommended for use on	Corrosive/ Non-corrosive	Working Range °C	Product Availability
Soft Solder Flux No. 1S™	Carbon steel / stainless steel	Corrosive	350°C	1 litre container
Soft Solder Flux No. 2S™	Copper / brass	Non Corrosive	350°C	0.5 litre container
Soft Solder Flux No. 3S™	Copper / brass / carbon steel Stainless steel	Corrosive	350°C	1kg container

Flux cored wire is available with either a corrosive acid core ('A' Core) or a rosin based flux core ('R' 'RA', RMA types).

Flux coated washers and rings are also available where production capabilities allow.

Product Availability

Flux Cored Wire	1.6mm, 2.4mm, 3.2mm
Wire	0.5mm to 3mm
Foil	On request
Other	Rings, preformed shapes, soldering pastes on request

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Johnson Matthey

Metal Joining York Way, Royston, Hertfordshire, SG8 5HJ, UK

Telephone: +44 (0) 1763 253200

Fax: +44 (0) 1763 253168

email: mj@matthey.com

www.jm-metaljoining.com