



## Solder Powder Technical Data Sheet

**Alloy Composition:** AMT's powders are produced using only the highest quality virgin materials. All our powders exceed the J-STD-006 specification.

**Oxygen Content:** All AMT solder powders are atomized in a controlled atmosphere to minimize oxygen content. Typical values for 63Sn/37Pb are listed below.

**Particle Size:** AMT's proprietary separation process ensures perfectly sized powder without surface damage. The particle size distributions exceed the J-STD-006 specification and contain no fines below 20 microns (Types 2,2A,3,4).

### Solder Alloys

Solder Alloy	Liquidus °C	Solidus °C
42Sn/58Bi	138	138
43Sn/43Pb/14Bi	163	144
62Sn/36Pb/2Ag	179	179
63Sn/37Pb	183	183
60Sn/40Pb	191	183
95.5Sn/4Ag/. 5Cu	217	219
95.8Sn/3.5Ag/. 7Cu	217	219
96.5Sn/3.5Ag	221	221
99.3Sn/. 7Cu	227	227
95Sn/5Sb	240	235
95Sn/5Ag	245	221
5Sn/92.5Pb/2.5Ag	284	280
10Sn/88Pb/2Ag	290	268
10Sn/90Pb	302	268
5Sn/95Pb	312	308

### Powder Size Distribution (Weight %)

Powder Type	Less than 1% larger than	At least 95% between	5% maximum less than
Type 2	75 microns	75-45 microns	45 microns
Type 2A	53 microns	53-38 microns	38 microns
Type 3	45 microns	45-25 microns	25 microns
Type 4	38 microns	38-25 microns	25 microns
Type 5	32 microns	25-15 microns	15 microns
Type 6	25 microns	10-20 microns	10 microns

### Oxygen Content

Powder Type	Oxygen Content
Type 2	<100 ppm
Type 2A	<110 ppm
Type 3	<120 ppm
Type 4	<150 ppm
Type 5	<200 ppm
Type 6	<200 ppm

**Certificate of Analysis:** All AMT powder is delivered with a detailed CofA including chemical analysis and image analysis size distribution. Coulter particle distribution available upon request

**Packaging:** All AMT powder is packaged in 12.5kg metallized mylar bags under inert gas. Two bags are packed in sealed polyethylene containers to prevent damage. Alternative packaging is available to satisfy customer requirements.

**Facility Capacity:** AMT's powder facility is capable of producing 750,000 kg of finished solder powder per year.

