


Updated: 01/02/2010 N° 01	<b>SPECIFICATION</b>	
Ref. : wire	<b><u>Solder wire</u></b>	
Created : 03/05/01	<b><u>Alloy " Sn5Pb93.5Ag1.5"</u></b> <b>Incorporated flux: CR2</b>	

### 1 – GENERAL CHARACTERISTICS :

High temperature, (HMP) solders wire, with incorporated flux for soldering equipment in electronics.  
Conform to standards: NF 90550 – DIN 1707-8511 – QQS 571E – MIL.F.142560.

### ADDITIONAL INFORMATION:

Our manufacturing processes have been subjected to FMECA analysis (equivalent of AMDEC in Europe).

### 2 – CHEMICAL CHARACTERISTICS :

- 2.1 Amount of Tin : 5% ± 0.5%  
2.2 Amount of Lead : 93.5% ± 0.5%  
2.3 Amount of Silver : 1.4 % à 1.6 %  
2.4 Tin-lead-silver double refined at first melting, with an overall purity of 99.6 %.

#### 2.5 Chart of maximum impurities:

Cu	Cd	Sb	Bi	Fe	Zn	Al	As	Others
0.05%	0.002%	0.05%	0.01%	0.02%	0.001%	0.001%	0.01%	0.05%

#### 2.5 Available types of incorporated flux:

**Rosin Halide Free:** EL - R45 - RSNB  
**Rosin Activated:** RD – RDV- **CR**  
**Hydro soluble:** SR - HC2

**Rosin Mildly Activated:** RL – CT2  
**Synthetic Halide Free:** S45V  
**Others:** please consult us.

#### 2.6 Amount of flux incorporated: BS441 Grades 1, 2 or 3

BS441 Flux Grade	----- Mass of flux -----		
	Minimum	Nominal	Maximum
1	1.0 %	1.3 %	1.5 %
2	1.6 %	2.2 %	2.6 %
3	2.7 %	3.3 %	3.9 %

### 3– PHYSICAL CHARACTERISTICS :

**Alloy: Sn5Pb93.5Ag1.5**

- 3.1 Melting point : Solidus @296°C to liquidus @ 301°C  
3.2 Specific weight : 11.04 g/cm<sup>3</sup>  
3.3 Wire diameter : From 0.5 mm to 6 mm  
3.4 Working temperature : 350 – 460 °C

**\*FLUX CR**

Pine Rosin  
Amine 1%  
Acidity index : 220  
Chlorine equivalent: 1.4%  
RA – BS 441 Grade 2

### 4– PACKAGING:

- 4.1 Supplied on spools : 500g (Black DIN winding on request)  
4.2 Packed in cartons of : 12 / 24kg.  
4.3 Identification : Boxes and spools carry product information labels.  
4.4 Quality assurance : A certificate of conformity can be issued for each manufactured batch if requested at the time of ordering.  
4.5 Storage : in original packaging at room temperture for 12 months.