

# Kit of 4 ESD Epoxy Coated Tweezers

## Specification

- Low carbon austenitic steel (Material number 1.4435, DIN X2CrNiMo18-14-3, AISI number 316L)
- Contains from 16.5 to 18.5 wt% chromium and has important quantities of nickel and molybdenum as additional alloying elements
- Non-magnetizable (80%)
- Good corrosion resistance to most chemicals, salts and acids
- Generally used where corrosion resistance and toughness are primary requirements
- Typical applications include tweezers for the electronic industry, watch-makers, jewelers and laboratory and medical applications in moderately aggressive chemical environments



## Composition

Component	Wt.%	Component	Wt.%	Component	Wt.%
C	≤0.03	Si	≤1.0	Mn	≤2.0
P	≤0.045	S	≤0.03	Cr	17.0-19.0
Mo	2.5-3.0	Ni	12.5-15.0		

## Mechanical Properties

State	annealed
Density	8.0 g/cm <sup>3</sup>
Hardness HB30	≤ 215
Hardness Rockwell B	79
Tensile strength, ultimate	500-700 MPa
Tensile strength, yield	290
0.2% Yield stress	≥ 200 MPa
Elongation, break	40%
Modulus of elasticity	200 GPa

## Thermal Properties

Coef. of lin. therm expansion	16.0 E-6/°C	20°C-100°C
Coef. of lin. therm expansion	17.0 E-6/°C	20°C-300°C
Specific heat capacity	0.50 J/(g·K)	
Thermal conductivity	15 W/(m.K)	
Continuous use temperature	350°C	
Max service temperature, air	925°C	

## Electrical Properties

Resistivity	0.75 E-4 Ohm.cm
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### Art. Nr.

RND 550-00334

# Kit of 4 ESD Epoxy Coated Tweezers



## Kit Includes:

### ESD Epoxy Coated Tweezers, Grooved/Straight, 120 mm



Tip type	Grooved, Straight
Product OAL (mm - in)	120.00 - 4.724
Product width (mm - in)	10.00 - 0.394
Product height (mm - in)	13.00 - 0.512
Tip thickness A (mm - in)	0.30 - 0.012
Tip width B (mm - in)	1.50 - 0.059
Net weight (g-lb)	16 - 0.035

### ESD Epoxy Coated Tweezers, 45° Angled, 115 mm



Tip type	Angled
Product OAL (mm - in)	115.00 - 4.528
Product width (mm - in)	10.00 - 0.394
Product height (mm - in)	11.00 - 0.433
Tip thickness A (mm - in)	0.30 - 0.012
Tip width B (mm - in)	1.60 - 0.063
Net weight (g-lb)	16 - 0.035
Degree of bending	45

### ESD Epoxy Coated Tweezers, Fine/Curved, 120 mm



Tip type	Fine, Curved
Product OAL (mm - in)	120.00 - 4.724
Tip thickness A (mm - in)	0.15 - 0.006
Tip width B (mm - in)	0.25 - 0.01

# Kit of 4 ESD Epoxy Coated Tweezers



## Kit Includes:

ESD Epoxy Coated Tweezers, Sharp/Straight/Fine, 120 mm



Tip type	Sharp/Straight/Fine
Product OAL (mm - in)	120.00 - 4.724
Product width (mm - in)	10.00 - 0.394
Product height (mm - in)	10.00 - 0.394
Tip thickness A (mm - in)	0.15 - 0.006
Tip width B (mm - in)	0.20 - 0.008