

#### **Electronics**

Tweezers 251 Plastic tips Tweezers



#### 4 1/4" 110 mm



# 251.SA Anti-Magnetic Anti-Acid Stainless Steel body with ESD Carbofib (CF) tips

#### **General Notes**

- 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
- 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 .%
С	≤0.03	Si	≤1.0	Mn	≤2.0
Р	≤0.045	S	≤0.03	Cr	17.0-19.0
Мо	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:	15W/(m·K)		
Continuos use temperature:	350°C		
Max service temperature, ait	925°C		

## **Electrical properties**

Resistivity 0.75 E-4 Ohm.cm

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