ideal-tek swiss made

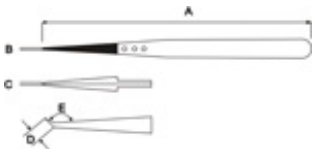
5 Plastic Replaceable tips Tweezers

Very fine tips

A 5" 130 mm

B 0.02" 0.5 mm

C 0.025" 0.6 mm



5SVR.SA **Anti-Magnetic Anti-Acid Stainless Steel body with ESD PVDF (SV) tips**

General notes *Plastic type SV*

- **PVDF** polyvinylidene fluoride carbon fibre reinforced
- excellent mechanical strength and toughness
- smooth surface
- heat stabilized, high heat capability, continuous use temperature up to 150°C
- high purity (clean room and medical devices approved, low extraction value)

- excellent chemical resistance to most aggressive substances (mineral and organic acid) and solvents (hydrocarbons, alcohols, halogenated), resistant to halogens
- outstanding resistance to hydrofluoric acid (40% conc., 90°C), nitric acid (50% conc., 90°C), hydrochloric acid (36% conc., 90°C)
- high abrasion resistant
- resistant to UV and nuclear radiation (sterilisation)
- ESD safe material, (avoid powder attraction, sparks generation, ignition sources)
- typical applications include handling of very scratch- and contamination-sensitive components, cleaning and etching processes.

Mechanical properties

Flexural modulus +23°C:	7500 MPa	ASTM D790
Tensile modulus +23°C:	8000 MPa	ASTM D638
Tensile strength +23°C:	120 MPa	ASTM D638
Flexural strength +23°C	150 MPa	ASTM D790
Shore D hardness:	82	ASTM D2240
Izod-Impact strength (notched) +23°C	110 J/m	ASTM D256

Thermal properties

Temp. of defl. under load (1.80 MPa):	158°C	ASTM D648
Temp. of defl. under load (0.45 MPa):	170°C	ASTM D648
Vicat softening temperature (50°C/h 50N):	172°C	ISO 306
Coef. of lin. therm expansion, normal:	7.00 E-5/°C	ASTM D696
Continuous Use Temprature	150°C	20'000 h
Short Time Temperature	200°C	

General Notes *Stainless steel type SA*

- 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.%
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/cm³
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

Credits