() ideal-tek

TECHNICAL DATA SHEET

Engineering coating type DN

General notes:

- » PVC FOAM
- » very soft and elastic, good tear resistance
- » very good abrasion/wear resistance (improved life-time)
- » good chemical resistance (oils, grease, fuels, acids, detergents and soaps, alcohols)
- » electrically static dissipative, ESD-safe material!
- » typical applications include ESD-safe handles, floor and work surface mats

Physical Properties

Metric

Density	
Water Absorption	

0.530 g/cc
2.86 %

Mechanical properties

Hardness, Shore A	56.7
Tensile Strength, Ultimate	7.60 MPa
Tensile Strength, Yield	0.317 MPa
Elongation at Break	171 %

Thermal properties

Maximum Service Temperature, Air	70 °C
Minimum Service Temperature, Air	-150 °C

Electrical properties

Surface Resistivity 10⁹-10¹⁰ Ohm

This document contains information based on average values as obtained from the results of laboratory tests and observations made on the material. Ideal-Tek SA declines all responsibility from an improper use of the product described in this document.



TECHNICAL DATA SHEET

Stainless steel type SA

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

Density 8.0 g/cm^3 Hardness HB30 ≤ 215 Hardness Rockwell B79Tensile strength, ultimate $500-700 \text{ MPa}$ Tensile strength, vield 290
Hardness Rockwell B79Tensile strength, ultimate500-700 MPa
Tensile strength, ultimate500-700 MPa
Tensile strength, vield 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)	
Continuos use temperature	350°C	
Max service temperature, air	925°C	

Electrical properties

Resistivity

0.75 E-4 Ohm.cm

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