

MATERIAL DATASHEET

Alloy 430 Stainless Steel

UNS: S43000
EN-DIN: 1.4016

430 stainless is a ferritic straight chrome grade. 430 presents a good corrosion resistance and formability. Typical applications for 430 include: Appliance (components and surface), and automotive trim.

Nominal Composition

	C	Mn	P	S	Si	Cr	Ni	N	Fe		
min	-	-	-	-	-	16.0	-	-	-		
max	0.12	1.0	0.040	0.030	1.00	18.0	0.75	-	BAL		

Physical Properties

	At 70°F	At 20°C
Density	0.28 lb./in ³	7.74 g/cm ³
Modulus of Elasticity (E)	29.0 x 10 ³ ksi	200 x 10 ³ MPa
Coefficient of Expansion	5.8 x 10 ⁻⁶ microinches/in.-°F (70-600°F)	10.4 μm/m-°C (20-300°C)
Electrical Resistivity	23.68 μ ohm.in	60 μ ohm.cm
Thermal Conductivity	15.1 Btu-in./ft. ² hr.-°F	26.1 W/m-K

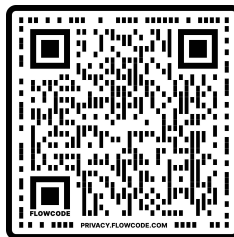
Applicable Specifications

AMS 5503, ASTM A240

Typical Mechanical Properties – Typical Room Temperature Mechanical Properties

Condition	Tensile Strength (UTS)	0.2% YS	Elongation% in 2" (50.8 mm)	Hardness Rockwell
Annealed	70 ksi (483 MPa)	45 ksi (310 MPa)	25	85 HRBW (Max)

Typical mechanical properties are based, AK source on ASTM A240



ELGILOY.COM

LIMITATION OF LIABILITY AND DISCLAIMER OF WARRANTY:

The content in these data sheets is provided primarily by third-party melting mills and is provided for reference only. It is not intended for engineering or design.

Applications may be discussed, however, Elgiloy Specialty Metals does not recommend or endorse any material for any particular end use or application.

In no event will Elgiloy Specialty Metals be liable for any damages whatsoever arising from the use of the information included in the data sheets.

The data included in this data sheet are typical values and may vary.

Elgiloy Specialty Metals makes no representations or warranties, express or implied, as to the accuracy, completeness, condition, suitability, performance, fitness for a particular purpose, or merchantability of any information contained in any data sheet.