

TI-ALLOY GRADE 2 TUBING FOR SURGICAL IMPLANTS

Ti-Grade 2 Material Data acc. ASTM F 67 R50400

Chemical Composition

Nitrogen	max. 0,03 wt.-%
Carbon	max. 0,08 wt.-%
Hydrogen	max. 0,015 wt.-%
Iron	max. 0,03 wt.-%
Oxygen	max. 0,25 wt.-%
Titanium	balance

Physical Properties

Melting Point	1660° C
Density	4,51 g/cm ³
Modulus of Elasticity	103 x 10 ³ MPa
β-Transus-Temperatur	ca. 910° C

Mechanical Properties (annealed)

Ultimate Tensile Strength	min. 345 MPa
Yield Strength	min. 275 MPa
Total Elongation	min. 30%

Microstructure in fully annealed condition

Grain Size	min. 4
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Comments

These values should only be used as guidelines for developing material specifications. Properties strongly depend on processing history. The values listed above are typical for uniaxial tension. Upon request, we can also deliver this material with other properties.

