

SPECIFICATIONS

Commercial 439/441

Stainless steel producers have an ongoing programme of development designed to produce new grades. These new grades are sometimes developed for specific end uses and sometimes to improve upon an existing grade.

Uginox F18TNb spans both of these two areas since it was developed for a particular range of applications in certain industries where it can be used in place of type 1.4301 (304). On some aspects, its properties and performance in service are actually superior to 304 whilst on others it falls between 430 and 304. Notably however, it is also lower cost than 304.

This grade can be referred to as a 'Super-Ferritic'

Features:

- ~ Good for Deep Drawing
- ~ Good Weldability
- ~ Good pitting corrosion resistance
- ~ Good brightness
- ~ Polishes well

Applications/Industries:

The main target sector is catering equipment to replace grade 304

Availability:

- ~ 1250mm & 1500mm wide
- ~ Thicknesses 0.5mm to 2.0mm
- ~ Finishes Bright Annealed or Polished

CHEMICAL COMPOSITION

Manufacturer's Data	
Element	% Present
Chromium (Cr)	17.80 max
Ti plus Nb (Ti+Nb)	0.70 max
Carbon (C)	0.02 max
Iron (Fe)	Balance

ALLOY DESIGNATIONS

Stainless Steel Grade Uginox F187TNb is a modified form of AISI 439/441 and of 1.4509/1.4510 (UNS S43940, S43932 & S43035)

SUPPLIED FORMS

- Sheet
- Plate
- Tube

GENERIC PHYSICAL PROPERTIES

Property	Value
Density	7.70 g/cm ³
Melting Point	1505 °C
Thermal Expansion	11.0 x10 ⁻⁶ /K
Modulus of Elasticity	220 GPa
Thermal Conductivity	25.0 W/m.K
Electrical Resistivity	0.60 x10 ⁻⁶ Ω .m

MECHANICAL PROPERTIES

Manufacturer's Data	
Property	Value
Proof Stress	300 MPa
Tensile Strength	590 MPa
Elongation A50 mm	30 %

CONTACT

Address:	Please make contact directly with your local service centre, which can be found via the Locations page of our web site.
Web:	www.amari-ireland.com

REVISION HISTORY

Datasheet Updated	13 March 2020
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