

CORROSIONS-RESISTANT STEELS - AUSTENITIC STEELS AND NON MAGNETIC STEELS

Available Product Variants

Plates

Product Description

Aviation and aerospace industries, e.g.: washers

Applications

> Other Aerospace Components

> Structural parts (Aerospace)

Technical data

Material designation		Standards	
Alloy 321	Market grade	5510	AMS
1.4544	SEL	5645	
1.4541		5689	
1.4878			
X6CrNiTi18-10	EN	S524	BS
X12CrNiTi18-9		S526	
		321S31	
S32100	UNS	~S129	
S32109		S526	
321	AISI		
321H			
SUS321	JIS		

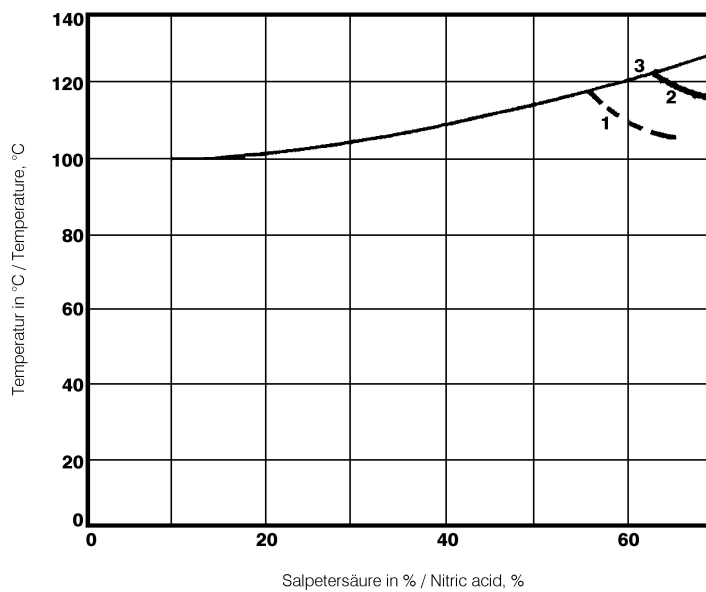
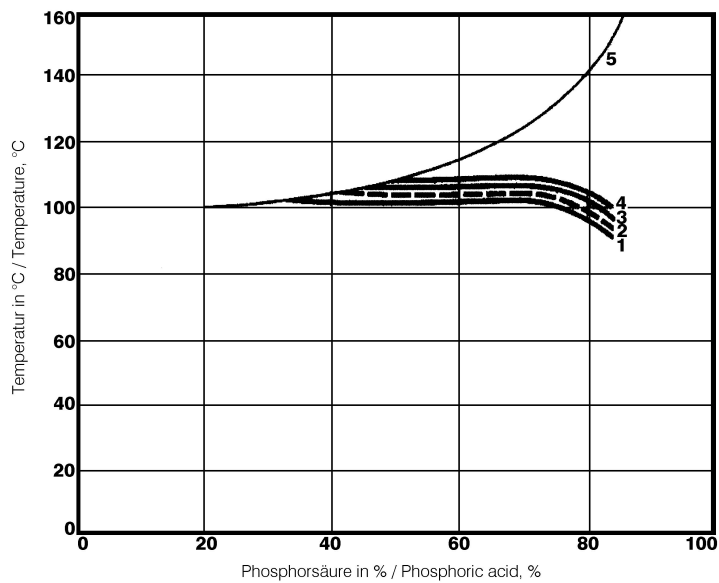
Chemical composition (wt. %)

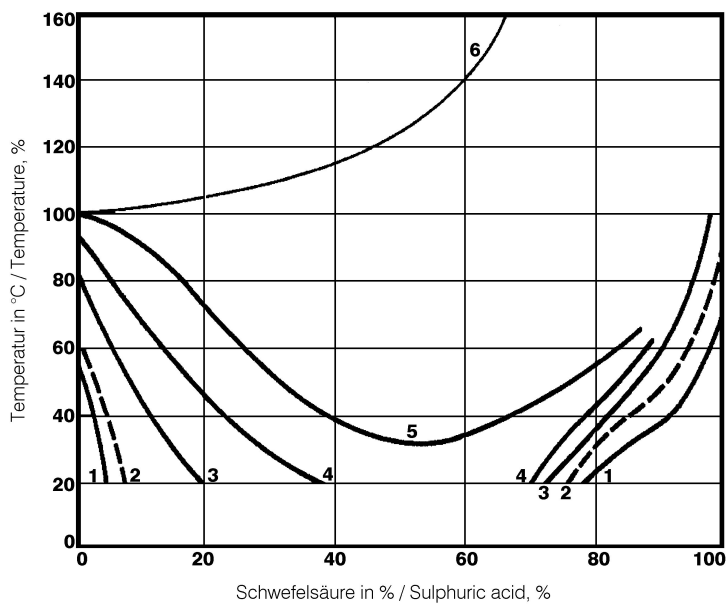
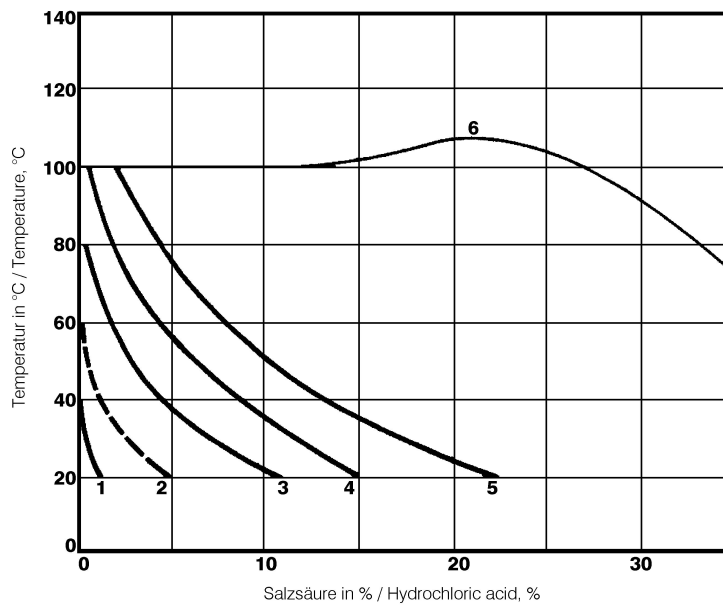
C	Si	Mn	Cr	Ni	Ti
0.03	0.5	1.7	17.5	9.7	≥ 5xC

Heat treatment

Solution annealing

Temperature	1,020 to 1,120 °C	Water, air (thickness below 2 mm)
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Physical Properties

Density	7.9	[kg/dm ³]
Thermal conductivity	15	[W/(m.K)]
Specific heat	500	[kJ/kg K]
Spec. electrical resistance	0.73	[Ohm.mm ² /m]
Modulus of elasticity	200	[10 ³ N/mm ²]

Thermal Expansions between 20°C | 68°F and ...

Temperature (°C)	100	200	300	400	500	600
Thermal expansion (10 ⁻⁶ m/(m.K))	16	16.5	17	17.5	18	18.5

If other available product variants are listed in addition to long products, please note that these may differ in terms of melting process, technical data, delivery and surface condition as well as available product dimensions. For mandatory technical specifications, other requirements and dimensions, please contact our regional voestalpine BÖHLER sales companies. The data contained in this brochure is merely for general information and therefore shall not be binding on the company. We may be bound only through a contract explicitly stipulating such data as binding. Measurement data are laboratory values and can deviate from practical analyses. The manufacture of our products does not involve the use of substances detrimental to health or to the ozone layer.