

EVERYTHING. FOR THE BEST SOLUTION.



NICKEL AND NICKEL ALLOYS

MATERIAL DATA SHEET

Nickel and Nickel alloys



The specified mechanical properties refer to an annealed tube version. Other comparable materials are available upon request.

Steel grade	Standard	Descr.	C max. [%]	Cr [%]	Mo [%]	Ni [%]	Others [%]	Rp0,2 min. [MPa]	Rm min. [MPa]	A5 min. [%]
2.4068	VdTÜV – Wb345	Alloy 201	0.020	-	-	≥ 99.00	Fe to 0.40 / Cu to 0.25 / Mg to 0.15 / Ti to 0.10	80	350 - 540	40
2.4360	VdTÜV – Wb263	Alloy 400	0.160	-	-	≥ 63.00	Fe 1.00 – 2.50 / Cu 28.00 – 34.00 / Al to 0.50	175	450 - 600	30
2.4602	VdTÜV – Wb479	Alloy C-22	0.010	20.00 - 22.50	12.50 - 14.50	Rest	Fe 2.00 – 6.00 / Co to 2.50 / W 2.50 – 3.50 / V to 0.35	310	690 - 950	45
2.4605	VdTÜV – Wb505	Alloy 59	0.010	22.00 - 24.00	15.00 - 16.50	Rest	Fe to 1.50 / Co to 0.30 / Al 0.10 – 0.40 / Cu to 0.50	340	690 - 900	40
2.4606	VdTÜV – Wb515	Alloy 686	0.010	19.00 - 23.00	15.00 - 17.00	Rest	Fe to 2.00 / W 3.00 – 4.40 / Co to 0.5 / Ti 0.02 – 0.25	310	690	45
2.4610	VdTÜV – Wb424	Alloy C-4	0.009	14.50 - 17.50	14.00 - 17.00	Rest	Fe to 3.00 / Co to 2.00 / Ti to 0.70	305	700 - 900	40
2.4617	VdTÜV – Wb436	Alloy B-2	0.010	≤ 1.00	26.00 - 30.00	Rest	Fe to 2.00 / Co to 1.00	340	755 - 1000	40
2.4633	DIN 17742	Alloy 602 CA	0.150 - 0.250	24.00 - 26.00	-	Rest	Al 1.80 – 2.40 / Cu to 0.10 / Fe 8.00 – 11.00 / Ti 0.10 – 0.20 / Y 0.05 – 0.12 / Zr 0.01 – 0.10	270	650	30
2.4663	VdTÜV – Wb485	Alloy 617	0.050 - 0.100	20.00 - 23.00	8.00 - 10.00	Rest	Co 10.00 – 13.00 / Ti 0.20 – 0.50 / Al 0.50 – 1.50 / Fe to 2.00	300	700 - 950	35

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2.4692	VdTÜV – Wb583/1	Alloy 31 Plus®	0.010	26.00 - 27.00	6.00 - 7.00	33.50 - 35.00	Fe Rest / Mn 1.00 – 4.00 / Cu 0.50 – 1.50 / N 0.10 – 0.25 / Al to 0.30	280	650 - 850	40
2.4700	VdTÜV – WB586	Alloy 2120 MoN	0.010	20.00 - 23.00	18.50 - 21.00	Rest	Cu to 0.50 / Al to 0.40 / W to 0.30 / Co to 0.30 / Fe to 1.5 / N 0.02 – 0.15	360	760	40
2.4816	VdTÜV – Wb305	Alloy 600	0.100	14.00 - 17.00	-	≥ 72.00	Fe 6.00 – 10.00 / Cu to 0.50 / Ti to 0.30 / Al to 0.30	180	500 - 700	35
2.4819	VdTÜV – Wb400	Alloy C-276	0.010	14.50 - 16.50	15.00 - 17.00	Rest	Fe 4.00 – 7.00 / Co to 2.50 / W 3.00 – 4.50 / V to 0.35	310	730 - 1000	30
2.4851	DIN 17742	Alloy 601	0.100	21.00 - 25.00	-	58.00 - 63.00	Al 1.00 – 1.70 / B to 0.006 / Cu to 0.50 / Fe to 18.00 / Ti to 0.50	205	550	30
2.4856	VdTÜV – Wb499	Alloy 625	0.030	21.00 - 23.00	8.00 - 10.00	Rest	Co to 1.00 / Fe to 5.00 / Ti to 0.40 / Al to 0.40 / Nb+Ta 3.20 – 3.80	400	830 - 1000	35
2.4858	VdTÜV – Wb432/2	Alloy 825	0.025	19.50 - 23.50	2.50 - 3.50	38.00 - 46.00	Fe Rest / Cu 1.50 – 3.00 / Ti 0.60 – 1.20 / Al to 0.20	235	550 - 750	30