|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grade and Main Chemical Composition% | | | | | | | | | | Mechanical Properties | | | |
| Grade | C | Si | Mn | P≤ | S≤ | Cr | Mo | Ni | Other | YS(Mpa) ≥ | TS (Mpa) ≥ | El (%) ≥ | Hardness(HV) ≤ |
| 201  (mid copper) | ≤0.15 | ≤1.00 | 10-11 | 0.045 | 0.03 | 12-14 | - | 0.8-1.0 | Cu 0.8-1.0 | 200 | 520 | 25 | 210 |
| 201  (high copper) | ≤0.15 | ≤1.00 | 9.5-10 | 0.04 | 0.03 | 13-15 | - | 1.0-1.2 | Cu 1.4-1.6 | 200 | 520 | 35 | 210 |
| 202 | ≤0.15 | ≤1.00 | 7.5-10.0 | 0.06 | 0.03 | 17-19 | - | 4.0 | N≤0.25 | 200 | 590 | 40 | 180 |
| 301 | ≤0.15 | ≤1.00 | ≤2.00 | 0.045 | 0.03 | 16-18 | - | 6.0 | - | 200 | 520 | 40 | 180 |
| 302 | ≤0.15 | ≤0.75 | ≤2.00 | 0.045 | 0.03 | 17-19 | - | 8.0-10.0 | - | 276 | 621 | 50 | 201 |
| 303 | ≤0.10 | ≤1.00 | ≤2.00 | 0.045 | 0.03 | 17-19 | - | 8.0-10.0 | Cu≤1.0 | 190 | 500 | 35 | - |
| 304 | ≤0.07 | ≤1.00 | ≤2.00 | 0.035 | 0.03 | 17-19 | - | 8.0 | - | 200 | 520 | 50 | 165-175 |
| 304L | ≤0.075 | ≤1.00 | ≤2.00 | 0.045 | 0.03 | 17-19 | - | 8.0 |  | 175 | 480 | 50 | 180 |
| 309S | ≤0.08 | ≤1.00 | ≤2.00 | 0.045 | 0.03 | 22-24 | - | 12.0 | - | 200 | 520 | 40 | 180 |
| 310S | ≤0.08 | ≤1.5 | ≤2.00 | 0.045 | 0.03 | 24-26 | - | 19.0 | - | 200 | 520 | 40 | 180 |
| 316 | ≤0.08 | ≤1.00 | ≤2.00 | 0.045 | 0.03 | 16-18.5 | 2 | 10.0 | - | 200 | 520 | 50 | 180 |
| 316L | ≤0.03 | ≤1.00 | ≤2.00 | 0.045 | 0.03 | 16-18 | 2 | 10.0 | - | 200 | 480 | 50 | 180 |
| 317 | ≤0.12 | ≤1.00 | ≤2.00 | 0.045 | 0.03 | 18-20 | 4 | 11.0 | - | 200 | 520 | 40 | 180 |
| 321 | ≤0.12 | ≤1.00 | ≤2.00 | 0.045 | 0.03 | 17-19 | - | 9.0 | Ti≥5×C | 200 | 520 | 40 | 180 |
| 330 | ≤0.015 | ≤2.00 | ≤2.00 | 0.045 | 0.015 | 15-17 | - | 33-37 | - | 230 | 550 | 30 | 223 |
| 347 | ≤0.08 | ≤1.00 | ≤2.00 | 0.045 | 0.015 | 17-19 | - | 9-12 | Nb:10xC to1.00 | 230 | 550 | 30 | 223 |
| 405 | ≤0.08 | ≤1.00 | ≤1.00 | 0.04 | 0.015 | 12-14 | - | - | Al:0.1-0.3 | 230 | 400 | 17 | 150 |
| 409L | ≤0.03 | ≤1.00 | ≤1.00 | 0.04 | 0.03 | 10.5-11.7 |  | ≤0.6 | Ti=6×C%~0.75 | 175 | 360 | 20 | 150 |
| 410 | ≤0.15 | ≤1.00 | ≤1.00 | 0.04 | 0.03 | 11.5-13.5 | - | - | - | 200 | 440 | 20 | 145 |
| 410S | ≤0.08 | ≤1.00 | ≤1.00 | 0.04 | 0.03 | 11.5-13.5 | - | - | - | 200 | 410 | 20 | 145 |
| 420 | 0.16-0.25 | ≤1.00 | ≤1.50 | 0.04 | 0.015 | 12-14 | - | - | - | 550 | 750 | 10 | - |
| 429 | ≤0.12 | ≤1.00 | ≤1.00 | 0.04 | 0.03 | 14-16 | - | - | - | 276 | 483 | 30 | 163 |
| 430 | ≤0.12 | ≤0.75 | ≤1.00 | 0.04 | 0.03 | 16-18 | - | ≤0.4 |  | 200 | 450 | 25 | 145 |
| 434 | ≤0.08 | ≤1.00 | ≤1.00 | 0.04 | 0.015 | 16-18 | 0.9-1.4 | - | - | 280 | 450 | 18 | - |
| 439 | ≤0.05 | ≤1.00 | ≤1.00 | 0.04 | 0.015 | 16-18 | - | - | - | 240 | 420 | 23 | 183 |
| 444 | ≤0.025 | ≤1.00 | ≤1.00 | 0.04 | 0.015 | 17-20 | 1.8-2.5 | - | - | 300 | 420 | 20 | 217 |
| 436 | ≤0.08 | ≤1.00 | ≤1.00 | 0.04 | 0.015 | 16-18 | 0.8-1.4 | - | - | 300 | 480 | 25 | - |
| 446 | 0.15-0.2 | ≤1.00 | ≤1.00 | 0.04 | 0.015 | 0.15-0.25 | 26-29 | - | - | 280 | 500 | 15 | 212 |
| 904L | ≤0.020 | ≤0.70 | ≤2.00 | 0.030 | 0.01 | 19-21 | 4 | 24-26 | Cu:1.2-2.0 | 220 | 530 | 35 | - |
| 2205 | ≤0.030 | ≤1.00 | ≤2.00 | 0.035 | 0.015 | 21-23 | 2.5-3.5 | 4.5-6.5 | - | 460 | 640 | 25 | 293 |
| 2507 | ≤0.030 | ≤1.00 | ≤2.00 | 0.035 | 0.015 | 24-26 | 3.0-4.5 | 6.0-8.0 | - | 530 | 730 | 20 | 310 |