

# CHEMICAL COMPOSITION CHART



## Stainless Steel & Steel Alloys

| Grade | C         | Cr          | Mn       | Ni          | P         | S         | Si       | Other            |
|-------|-----------|-------------|----------|-------------|-----------|-----------|----------|------------------|
| 303   | 0.15 max  | 17.00-19.00 | 2.00 max | 8.00-10.00  | 0.200 max | 0.15 min  | 1.00 max |                  |
| 304   | 0.08 max  | 18.00-20.00 | 2.00 max | 8.00-15.00  | 0.045 max | 0.030 max | 1.00 max |                  |
| 304H  | 0.04-0.10 | 18.00-20.00 | 2.00 max | 8.00-15.00  | 0.045 max | 0.030 max | 0.75 max | N: 0.10 max      |
| 304L  | 0.08 max  | 18.00-20.00 | 2.00 max | 9.00-13.00  | 0.045 max | 0.030 max | 1.00 max |                  |
| 309S  | 0.08 max  | 22.00-24.00 | 2.00 max | 12.00-15.00 | 0.045 max | 0.030 max | 1.00 max |                  |
| 310S  | 0.08 max  | 24.00-26.00 | 2.00 max | 19.00-22.00 | 0.045 max | 0.030 max | 1.50 max |                  |
| 316   | 0.08 max  | 16.00-18.00 | 2.00 max | 10.00-14.00 | 0.045 max | 0.030 max | 1.00 max | Mo: 2.00-3.00    |
| 316L  | 0.03 max  | 16.00-18.00 | 2.00 max | 12.00-15.00 | 0.045 max | 0.030 max | 1.00 max | Mo: 2.00-3.00    |
| 317L  | 0.03 max  | 18.00-20.00 | 2.00 max | 11.00-15.00 | 0.045 max | 0.030 max | 1.00 max | Mo: 3.00-4.00    |
| 321   | 0.08 max  | 17.00-19.00 | 2.00 max | 9.00-13.00  | 0.045 max | 0.030 max | 1.00 max | Ti: .5 x C% min  |
| 347   | 0.08 max  | 17.00-19.00 | 2.00 max | 9.00-13.00  | 0.045 max | 0.030 max | 1.00 max | Nb: .10 x C% min |
| 409   | 0.08 max  | 10.50-11.75 | 1.00 max | 0.50 max    | 0.045 max | 0.030 max | 1.00 max | Ti: 6xC% min     |
| 410   | 0.15 max  | 11.50-13.50 | 1.00 max |             | 0.040 max | 0.030 max | 1.00 max |                  |
| 410S  | 0.08 max  | 11.50-14.50 | 1.00 max | 0.60 max    | 0.040 max | 0.030 max | 1.00 max |                  |
| 416   | 0.15 max  | 12.00-14.00 | 1.25 max |             | 0.060 max | 0.15 min  | 1.0 max  | Mo: 0.6 max      |
| 430   | 0.12 max  | 16.00-18.00 | 1.00 max |             | 0.040 max | 0.030 max | 0.75 max |                  |
| 630   | 0.07 max  | 15.00-17.50 | 1.00 max | 3.00-5.00   | 0.040 max | 0.030 max | 1.00 max | N: 3.00-5.00     |