



HSM Wire International, Inc

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Nichrome 80/20

Nominal Data Sheet

Nominal Composition

| | |
|------------|---------|
| Chromium: | 19.50% |
| Silicon: | 1.25% |
| Iron: | 0.50% |
| Manganese: | 0.40% |
| Nickel: | Balance |

Typical Mechanical Properties for Annealed Wire

| | |
|---------------------------------|--------------------------|
| Ultimate Tensile Strength | 105,000 PSI |
| Yeild Strength (.2% offset) | 50,000 PSI |
| Elongation in 2" * | 35% |
| Modulus of Elasticity (Tension) | 31 x 10 ⁶ PSI |

* The measured elongation will be less as thickness decreases to .002" and less

Physical Properties

| | |
|---|-----------------------------|
| Density | 0.304 lbs/cu/in |
| Melting Point (approx.) | 1400°C |
| Electrical Resistivity @ RT | 108 Micromùcm |
| Temperature Coefficient of Resistivity (25° to 105°C) | 100 ppm / °C |
| Thermal Expansion Coefficient (20° to 100°C) | 13.4 x 10 ⁶ / °C |
| Thermal Conductivity @ 100°C | 15.0 W/mùK |
| Magnetic Attraction | None |

*To be used as a guideline Copyright 2013 HSM Wire International R1.06.24.2013