

## Eagle Brass 19010 XP-150 Copper Nickel Silicon, Spring

Category : Metal , Nonferrous Metal , Copper Alloy

### Material Notes:

19010 is an extreme versatile high performance copper nickel silicon alloy. It has an excellent combination of strength, conductivity and formability. Typical uses include terminals, relays, connectors, sockets, clips and springs. Information provided by Eagle Brass Company

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Eagle-Brass-19010-XP-150-Copper-Nickel-Silicon-Spring.php](http://www.lookpolymers.com/polymer_Eagle-Brass-19010-XP-150-Copper-Nickel-Silicon-Spring.php)

| Physical Properties | Metric    | English                  | Comments |
|---------------------|-----------|--------------------------|----------|
| Density             | 8.91 g/cc | 0.322 lb/in <sup>3</sup> | Annealed |

| Mechanical Properties      | Metric     | English      | Comments    |
|----------------------------|------------|--------------|-------------|
| Tensile Strength, Ultimate | >= 579 MPa | >= 84000 psi |             |
| Tensile Strength, Yield    | >= 510 MPa | >= 74000 psi | 0.2% offset |
| Elongation at Break        | >= 6.0 %   | >= 6.0 %     | in 2 in.    |
| Tensile Modulus            | 128 GPa    | 18500 ksi    |             |

| Thermal Properties   | Metric                     | English                            | Comments |
|----------------------|----------------------------|------------------------------------|----------|
| CTE, linear          | 16.7 µm/m-°C               | 9.30 µin/in-°F                     |          |
|                      | @Temperature 20.0 - 300 °C | @Temperature 68.0 - 572 °F         |          |
| Thermal Conductivity | 257.7 W/m-K                | 1788 BTU-in/hr-ft <sup>2</sup> -°F |          |

| Component Elements Properties | Metric | English | Comments |
|-------------------------------|--------|---------|----------|
| Copper, Cu                    | 98.5 % | 98.5 %  |          |
| Nickel, Ni                    | 1.6 %  | 1.6 %   |          |
| Silicon, Si                   | 0.20 % | 0.20 %  |          |

| Electrical Properties  | Metric            | English           | Comments |
|------------------------|-------------------|-------------------|----------|
| Electrical Resistivity | 0.00000297 ohm-cm | 0.00000297 ohm-cm | Annealed |

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

**Tel : +86 021-51131842**

**Mobile : +86 13061808058**

**Skype : lookpolymers**

**Address : United North Road 215,Fengxian District, Shanghai City,China**