

## Eagle Brass 316 Austenitic Stainless Steel, 1/4 Hardened

Category: Metal, Ferrous Metal, Stainless Steel, T 300 Series Stainless Steel

## **Material Notes:**

The Mo addition increases general corrosion resistance to pitting from chloride ion solutions, and provides increased strength at elevated temperatures. Properties are similar to those of Type 304 except that this alloy is somewhat stronger at elevated temperatures. Corrosion resistance is improved, particularly against sulfuric, hydrochloric, acetic, formic, and tartaric acids; acid sulfates and alkaline chlorides.Information provided by Eagle Brass Company

## Order this product through the following link:

http://www.lookpolymers.com/polymer\_Eagle-Brass-316-Austenitic-Stainless-Steel-14-Hardened.php

| Physical Properties | Metric    | English                  | Comments    |
|---------------------|-----------|--------------------------|-------------|
| Density             | 7.92 g/cc | 0.286 lb/in <sup>3</sup> | As Annealed |

| Mechanical Properties   | Metric     | English       | Comments    |
|-------------------------|------------|---------------|-------------|
| Tensile Strength        | >= 862 MPa | >= 125000 psi |             |
| Tensile Strength, Yield | >= 517 MPa | >= 75000 psi  | 0.2% Offset |
| Elongation at Break     | >= 10 %    | >= 10 %       | in 2 inches |
| Tensile Modulus         | 193 GPa    | 28000 ksi     |             |

| Thermal Properties   | Metric                     | English                     | Comments |
|----------------------|----------------------------|-----------------------------|----------|
| CTE, linear          | 18.5 μm/m-°C               | 10.3 μin/in-°F              |          |
|                      | @Temperature 20.0 - 649 °C | @Temperature 68.0 - 1200 °F |          |
| Thermal Conductivity | 15.9 W/m-K                 | 110 BTU-in/hr-ft²-°F        |          |

| Component Elements Properties | Metric        | English       | Comments              |
|-------------------------------|---------------|---------------|-----------------------|
| Carbon, C                     | <= 0.080 %    | <= 0.080 %    |                       |
| Chromium, Cr                  | 16 - 18 %     | 16 - 18 %     |                       |
| Iron, Fe                      | 62.095 - 72 % | 62.095 - 72 % | Calculated as Balance |
| Manganese, Mn                 | <= 2.0 %      | <= 2.0 %      |                       |
| Molybdenum, Mo                | 2.0 - 3.0 %   | 2.0 - 3.0 %   |                       |
| Nickel, Ni                    | 10 - 14 %     | 10 - 14 %     |                       |
| Phosphorous, P                | <= 0.045 %    | <= 0.045 %    |                       |
|                               |               |               |                       |



| Silicon, Si<br>Component Elements Properties | Metric     | English    | Comments |  |
|----------------------------------------------|------------|------------|----------|--|
| Sulfur, S                                    | <= 0.030 % | <= 0.030 % |          |  |

## **Contact Songhan Plastic Technology Co.,Ltd.**

Website: www.lookpolymers.com Email: sales@lookpolymers.com

Tel: +86 021-51131842 Mobile: +86 13061808058

Skype: lookpolymers

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