

CMW® ELKONIUM 405 palladium based alloy

Category : Metal , Nonferrous Metal , Precious Metal , Palladium Alloy

Material Notes:

Palladium belongs to the platinum group of metals and like platinum is highly resistant to atmospheric corrosion; however, it begins to tarnish at temperatures above 400(C. It has a high melting point (1552(C) and, like platinum, resists arc formation. Its low electrical conductivity (16% IACS) limits its application to low current circuits. It costs much less than platinum, and is used as a lower cost alternative. Economics normally dictate that it be supplied as a composite contact with a thin contact metal facing silver brazed to a nickel-plated steel rivet, screw, or projection weld button backing.ELKONIUM® 405 is a palladium base alloy sold by CMW containing sufficient ruthenium to increase the hardness. Its corrosion resistance is similar to that of palladium and its resistance to transfer is greater than that of pure palladium. It is used in thermostats and other sensitive low voltage devices, and is a lower cost alternative to platinum alloys for these applications.Information provided by CMW Inc.

Order this product through the following link:

http://www.lookpolymers.com/polymer_CMW-ELKONIUM-405-palladium-based-alloy.php

Physical Properties	Metric	English	Comments
Density	12.0 g/cc	0.434 lb/in ³	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell 15T	85	85	annealed
	92	92	cold worked
Tensile Strength, Ultimate	483 MPa	70000 psi	annealed
	689 MPa	100000 psi	cold worked
Elongation at Break	2.0 %	2.0 %	cold worked
	13 %	13 %	annealed

Component Elements Properties	Metric	English	Comments
Palladium, Pd	89 %	89 %	
Ruthenium, Ru	11 %	11 %	

Electrical Properties	Metric	English	Comments
Electrical Resistivity	0.0000287 ohm-cm	0.0000287 ohm-cm	6 % IACS

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