

Goodfellow Nickel 55/Titanium 45 Shape Memory Alloy

Category : Metal , Nonferrous Metal , Nickel Alloy

Material Notes:

Shape memory alloy is a description applied to that group of metallic materials which show the ability to return to the previously defined shape or size when subjected to the correct thermal procedure. Uses include blood clot filters, cryogenic coupling rings, proportional control valves and orthodontic correction. Information provided by Goodfellow.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Goodfellow-Nickel-55Titanium-45-Shape-Memory-Alloy.php

Physical Properties	Metric	English	Comments
Density	6.50 g/cc	0.235 lb/in ³	

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	1140 MPa	165000 psi	
Elongation at Break	15 - 40 %	15 - 40 %	
Tensile Modulus	60.0 - 90.0 GPa	8700 - 13100 ksi	

Thermal Properties	Metric	English	Comments
CTE, linear	6.60 $\mu\text{m}/\text{m}\cdot\text{°C}$	3.67 $\mu\text{in}/\text{in}\cdot\text{°F}$	Martensitic
	@Temperature 20.0 °C	@Temperature 68.0 °F	
	11.0 $\mu\text{m}/\text{m}\cdot\text{°C}$	6.11 $\mu\text{in}/\text{in}\cdot\text{°F}$	Austenitic
	@Temperature 20.0 °C	@Temperature 68.0 °F	
Thermal Conductivity	8.60 W/m-K	59.7 BTU-in/hr-ft ² -°F	Martensitic
	18.0 W/m-K	125 BTU-in/hr-ft ² -°F	Austenitic
Melting Point	1310 °C	2390 °F	

Component Elements Properties	Metric	English	Comments
Nickel, Ni	55 %	55 %	
Titanium, Ti	45 %	45 %	

Electrical Properties	Metric	English	Comments
Electrical Resistivity	0.0000100 ohm-cm	0.0000100 ohm-cm	Austenitic
	0.0000800 ohm-cm	0.0000800 ohm-cm	Martensitic

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