

## Performance Alloys MoldStar® 150 (PAS 940) Copper Mold Alloy

Category: Metal, Nonferrous Metal, Copper Alloy

## **Material Notes:**

Description: MoldStar® 150 is a high-performance, beryllium-free copper alloy for the blow molding and injection molding industries. In addition to its high thermal conductivity, MoldStar® 150 offer the following qualities: Accepts and maintains high surface finishes Accepts etching and texturingOffers welding compatibility with other copper alloys, tool steels and stainless steels to provide composite materials for increased surface hardness in specific areas Requires no additional heat treatment Retains the inherent corrosion resistance of copper Can be readily machined using conventional practices as well as the electrical discharge method (EDM) Applications: Mold Cores Cavities Sprue Bushings Hot Runner Systems Core Pins Ejector Pins Sleeves Blow Pins Information provided by Performance Alloys.

## Order this product through the following link:

http://www.lookpolymers.com/polymer\_Performance-Alloys-MoldStar-150-PAS-940-Copper-Mold-Alloy.php

Physical Properties	Metric	English	Comments
Density	8.72 g/cc	0.315 lb/in³	

Mechanical Properties	Metric	English	Comments
Hardness, Brinell	210	210	3000kg
Hardness, Rockwell B	94	94	
Tensile Strength at Break	689 MPa	100000 psi	
Tensile Strength, Yield	517 MPa	75000 psi	
Elongation at Break	13 %	13 %	in 2"
Compressive Strength	552 MPa	80000 psi	

Thermal Properties	Metric	English	Comments
CTE, linear	17.5 μm/m-°C	9.70 μin/in-°F	
	@Temperature 20.0 °C	@Temperature 68.0 °F	
Thermal Conductivity	259 W/m-K	1800 BTU-in/hr-ft <sup>2</sup> -°F	
	@Temperature 15.6 °C	@Temperature 60.0 °F	

Component Elements Properties	Metric	English	Comments	
Chromium, Cr	0.40 %	0.40 %		
Copper, Cu	96.4 %	96.4%		
Nickel, Ni	2.5 %	2.5 %		



Component Elements Properties	Metric	English	Comments
Descriptive Properties		Value	Comments
Thermal diffusivity at 68°F		2.32 ft²/hr	

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

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