

## Plansee MHC Molybdenum-Hafnium-Carbon

Category : Metal , Nonferrous Metal , Molybdenum Alloy , Refractory Metal

### Material Notes:

Molybdenum is alloyed with hafnium and carbon with extremely fine carbides providing a fine microstructure. Characteristics: Outstanding heat resistance Outstanding creep resistance Withstands extreme thermal and mechanical loads Typical Applications: Metal forming, extrusion dies Information provided by Plansee.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Plansee-MHC-Molybdenum-Hafnium-Carbon.php](http://www.lookpolymers.com/polymer_Plansee-MHC-Molybdenum-Hafnium-Carbon.php)

Physical Properties	Metric	English	Comments
Specific Gravity	10.3 g/cc	10.3 g/cc	Calculated

Thermal Properties	Metric	English	Comments
Maximum Service Temperature, Air	1550 °C	2820 °F	

Component Elements Properties	Metric	English	Comments
Carbon, C	0.050 - 0.12 %	0.050 - 0.12 %	
Hafnium, Hf	1.2 %	1.2 %	
Molybdenum, Mo	98.68 - 98.75 %	98.68 - 98.75 %	Balance

Processing Properties	Metric	English	Comments
Recrystallization Temperature	1550 °C	2820 °F	Deformation level - 90%

Descriptive Properties	Value	Comments
Creep Resistance	< 1500°C	greater than pure Mo
Ductility	greater than pure Mo	after HT use
Stability at High Temperature	< 1500°C	much greater than pure Mo
Stability at Room Temperature	greater than pure Mo	
Thermal Conductivity	Less than pure Mo (142 W/m-K)	
Weldability	greater than pure Mo	

## Contact Songhan Plastic Technology Co.,Ltd.

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