

## PSM Industries PolyAlloys MIM-Fe-%3Si Grade 1 Soft Magnetic Steel

Category: Metal, Electronic/Magnetic Alloy

## **Material Notes:**

PolyAlloys Injected Metals, a division of PSM Industries, Inc., offers precision, High-Performance components for structural, magnetic and electronic applications that require a high degree of complexity and near full theoretical density by utilizing Metal Injection Molding (MIM).

MIM can economically produce complex shapes beyond the capability of conventional Powdered Metallurgy. Benefits of Metal Injection Molding 96-98% of Theoretical DensityExcellent Mechanical PropertiesAvoids Costly Secondary OperationsExcellent Surface

FinishesCapable of Extreme 3-D GeometriesHolds Tight TolerancesExtremely Thin Wall Section CapabilitiesInformation Provided by PolyAlloys, a division of PSM Industries

## Order this product through the following link:

http://www.lookpolymers.com/polymer\_PSM-Industries-PolyAlloys-MIM-Fe-3Si-Grade-1-Soft-Magnetic-Steel.php

Physical Properties	Metric	English	Comments
Density	7.60 g/cc	0.275 lb/in <sup>3</sup>	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell B	80	80	Macro
Tensile Strength, Ultimate	531 MPa	77000 psi	
Tensile Strength, Yield	393 MPa	57000 psi	
	@Strain 0.200 %	@Strain 0.200 %	
Elongation at Yield	24 %	24 %	in 1 in.

Electrical Properties	Metric	English	Comments
Magnetic Permeability	>= 8000	>= 8000	
	8500	8500	Typical
Magnetic Coercive Force, Hc	0.70 Oe	0.70 Oe	
Magnetic Remanence, Br	12000 Gauss	12000 Gauss	

Descriptive Properties	Value	Comments
B25 (kG)	14	min
	14.5	ТурісаІ
B500 (kG)	19.5	



## **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