

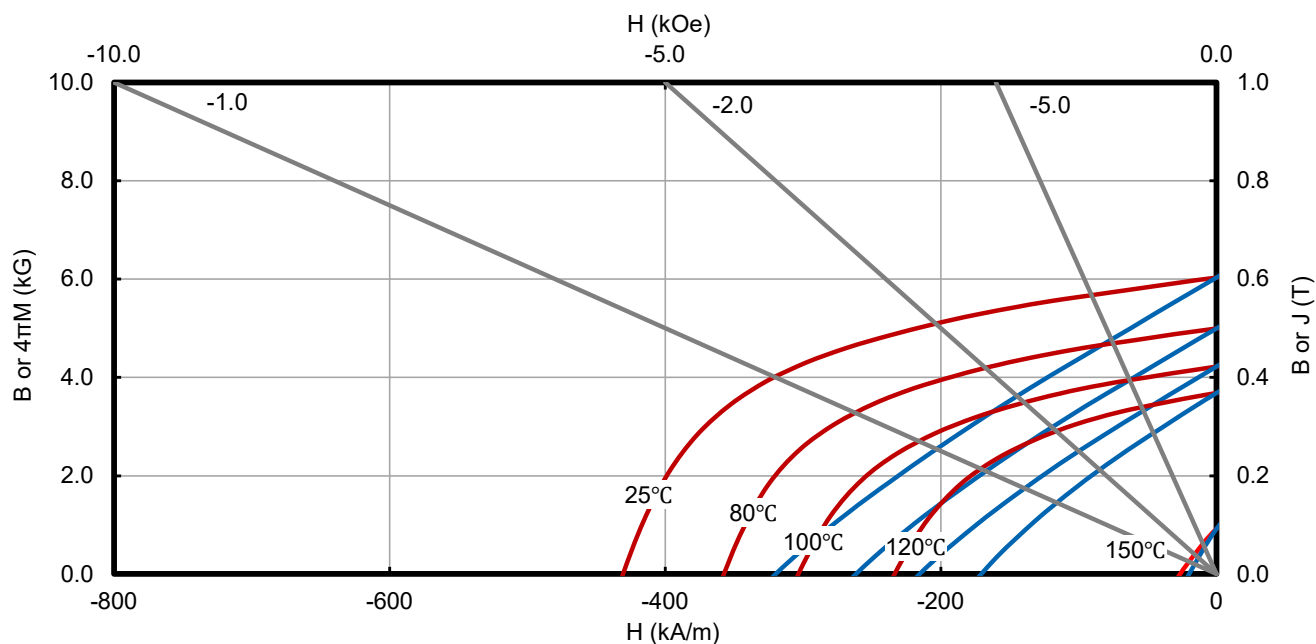
MQP-5.5-5HD-20621-070 Isotropic Powder*

Material Description

MQP-5.5-5HD-20621-070 is an isotropic magnet powder suitable for the manufacture of bonded magnets.

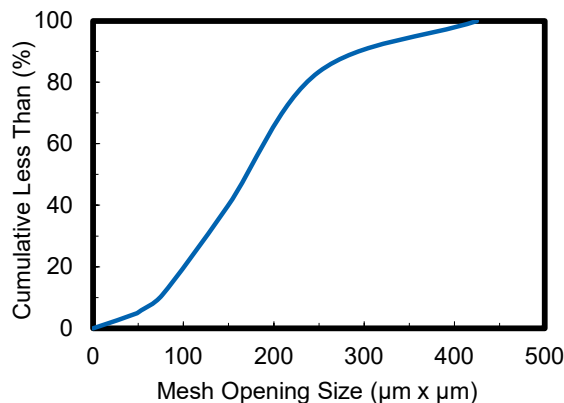
Powder Magnetic Characteristics¹

Specified	Residual Induction, B_r	560-600	mT.....	5.60-6.00	kG
	Energy Product $(BH)_{max}$	43-53	kJ/m ³	5.4-6.7	MGOe
	Intrinsic Coercivity, H_{ci}	360-460	kA/m.....	4.5-5.8	kOe
Typical	Intrinsic Coercivity, H_c	320	kA/m.....	4.0	kOe
	Magnetizing Field to $\geq 95\%$ Saturation H_s	≥ 800	kA/m.....	≥ 10.1	kOe
	Temperature coefficient of B_r , α , to 100°C.....	-0.40	%/°C		
	Temperature coefficient of H_{ci} , β , to 100°C.....	-0.40	%/°C		
	Curie Temperature, T_c	172	°C		
	Maximum Operating Temperature ²	60-80	°C		
	Maximum Process Temperature ³	100-125	°C		



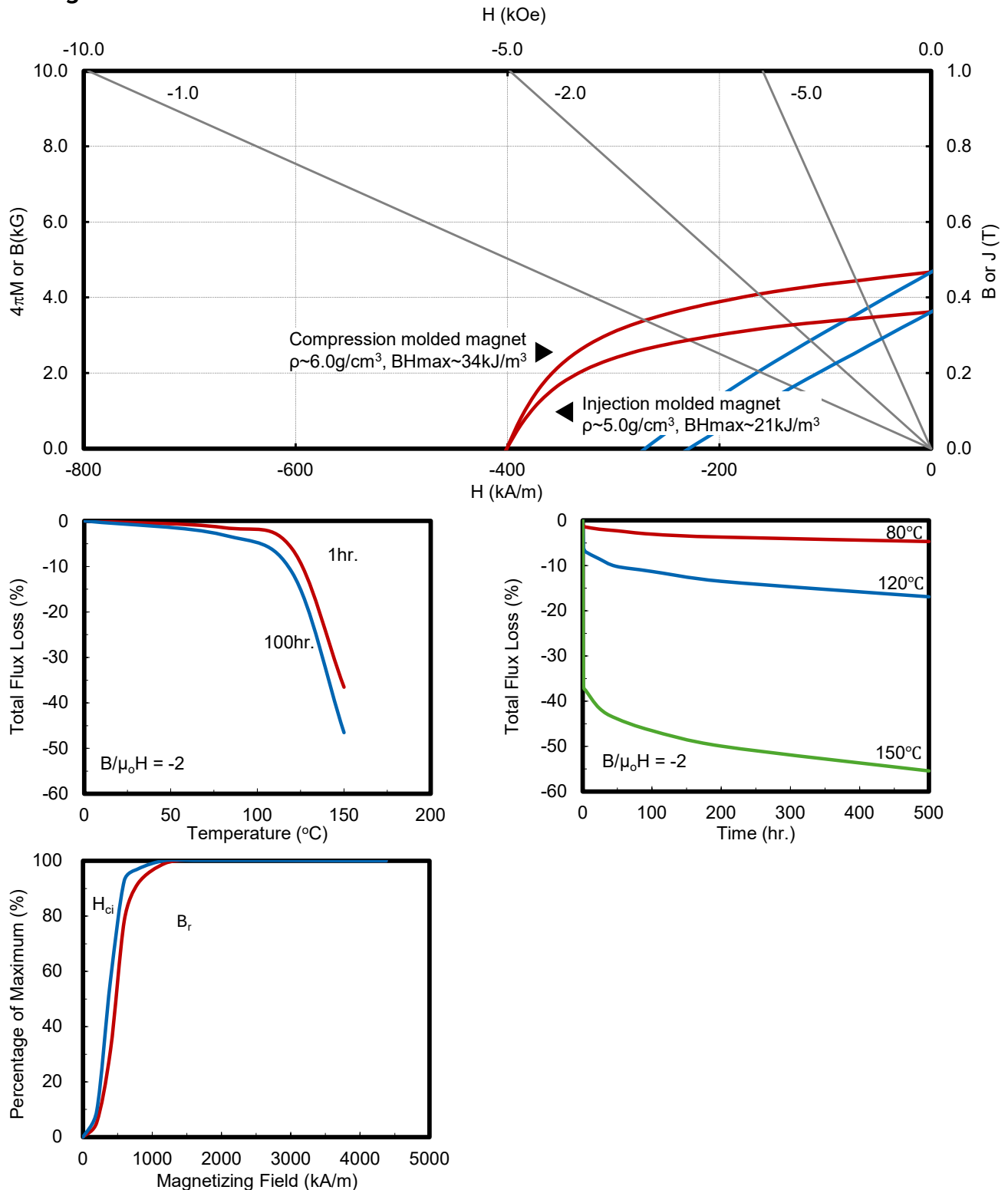
Physical Characteristics

Specified	Sieve Screen Analysis:		
	Total > 40 Mesh (420x420μm opening).....	< 0.1wt%	
	Total 60 Mesh (250μm x 250μm opening).....	< 25wt%	
	Total 270 Mesh (53μm x 53μm opening).....	< 12wt%	
Typical	Density (theoretical).....	7.57 g/cm ³	
	Apparent Density.....	2.71 g/cm ³	



*Contact Magnequench to obtain up-to-date product specifications

Bonded Magnet Characteristics⁴



1. Properties measured at 25°C, unless otherwise specified.
2. The Maximum Operating Temperature for a magnet made from this powder is dependent upon the specific application, the type of magnet, and magnet geometry. Contact our Application Engineers for more information
3. Maximum Process Temperature is defined here at <2% reduction in coercivity (i.e. structural loss) after heating powder 1 hour in air.
4. These properties are typical at 25°C and are representative only. Magnet properties are dependent upon powder loading and magnet manufacturing conditions. Contact our Application Engineers for information about Magnequench magnet products.