

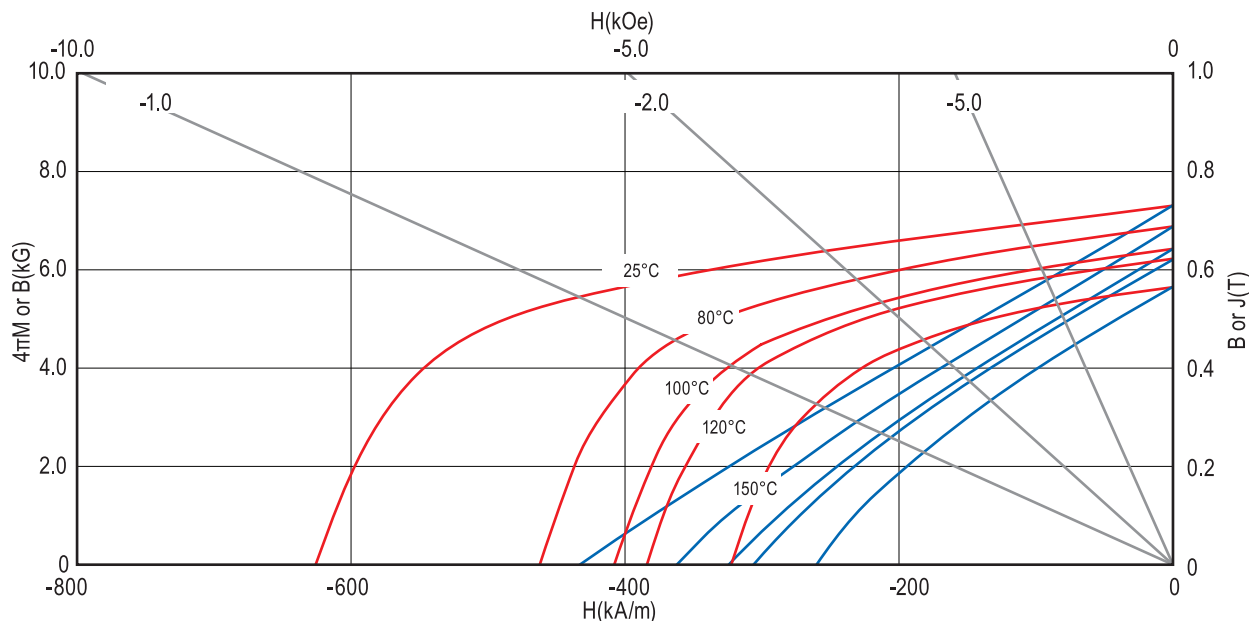
MQP™-11-8-20222-070 Isotropic Powder*

Material Description

MQP-11-8-20222 is one of our classic powders. It is a low cost powder designed for the use in applications that may not require the high properties typically exhibited by bonded Nd magnets. This powder is based on a patented Nd-Pr-La-Ce-Fe-B alloy composition. This material is produced by employing a proprietary rapid solidification process followed by a milling process and heat treatment.

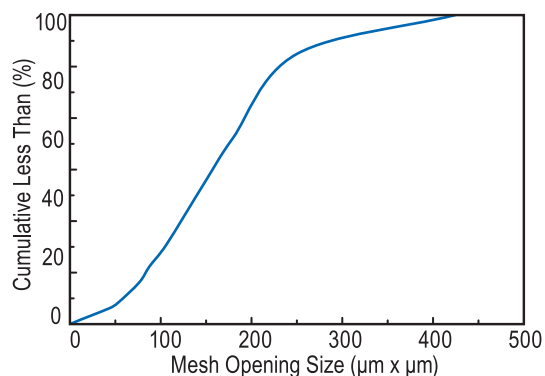
Powder Magnetic Characteristics¹

		<u>SI</u>		<u>CGS</u>
Specified	Residual Induction, B_r	750-770	mT	7.50-7.70 kG
	Energy Product, $(BH)_{max}$	83-93	kJ/m ³	10.4-11.7 MGOe
	Intrinsic Coercivity, H_{ci}	595-655	kA/m	7.4-8.3 kOe
Typical	Magnetizing Field to ≥ 95% Saturation H_s	≥ 1200	kA/m	≥ 15.1 kOe
	Temperature coefficient of B_r , α , to 100° C	-0.152	%/°C	
	Temperature coefficient of H_{ci} , β , to 100° C	-0.394	%/°C	
	Coercive Force, H_c	440	kA/m	5.5 kOe
	Curie Temperature, T_c	263	°C	
	Maximum Operating Temperature ²	120-130	°C	
	Maximum Process Temperature ³	175-200	°C	



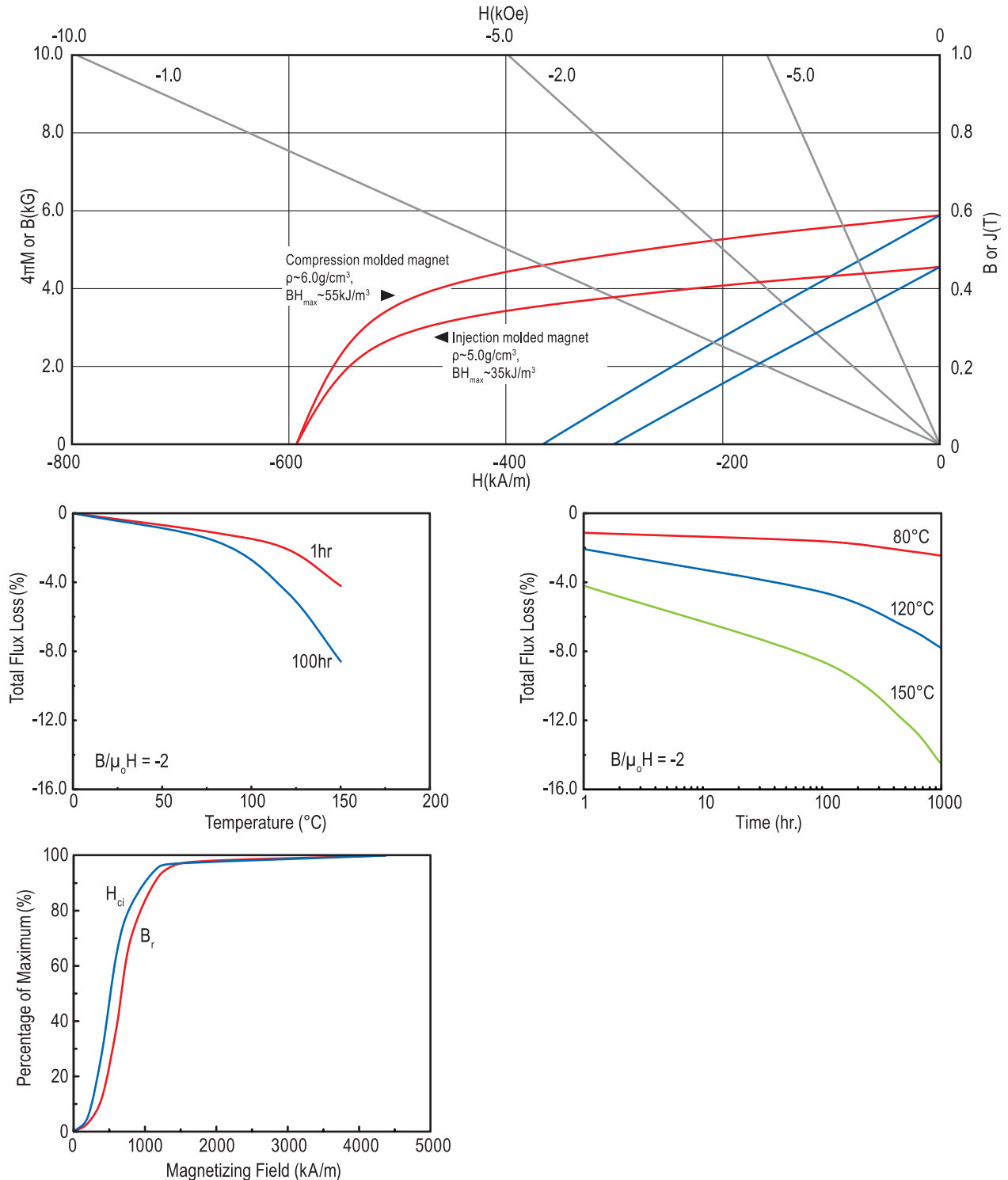
Physical Characteristics

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)	7.60 g/cm ³
	Apparent Density	2.67 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.

* This powder, the products that are made there from, and its manufacturing processes are subject to one or more of the following United States Patents: 6,183,572; 6,478,890; 6,527,875; 6,855,265; 6,979,409; 7,087,185; 7,144,463.