

ANISOTROPIC FERRITE POWDER FOR BONDED MAGNETS

1. MECHANICAL ORIENTATION POWDER (Sr-Ferrite)

Manufacturer: DOWA F-tec Co., Ltd.

1-1. Powder and Magnetic Properties : Typical value

1-2. APPLICATION : A Case of Calender Molding

Distributor: DOWA Electronics Materials Co., Ltd.

(Binder : NBR, Ferrite Content : 90mass%)

Revised date: 25th March 2020

Descriptions	Powder's Properties		Magnetic Properties - Compress Method			Magnetic Properties - Calender Roll Molded					Notes / Features
	Average Particle Diameter (APD)	Compressed Density (CD)	Residual Induction (Br)	Coercive Force (HcB)	Intrinsic Coercive Force (HcJ)	Density of Pressing (Dp)	Residual Induction (Br)	Coercive Force (HcB)	Intrinsic Coercive Force (HcJ)	Maximum Energy Product ((BH)max)	
Unit	SI	SI	SI	SI	SI	SI	SI	SI	SI	SI	
Products	μm	g/cm ³	mT (G)	kA/m (Oe)	kA/m (Oe)	g/cm ³	mT (G)	kA/m (Oe)	kA/m (Oe)	kJ/m ³ (MGOe)	
OP-56	0.96	3.09	185 (1850)	128 (1610)	259 (3250)	3.54	249 (2490)	181 (2280)	264 (3320)	11.7 (1.47)	Standard grade Good orientation and coercivity
NF-56	1.09	3.21	187 (1870)	126 (1580)	231 (2900)	3.55	241 (2410)	177 (2220)	267 (3360)	11.0 (1.38)	Improving magnetization by lowering coercivity Enable magnetization in low field
NF-88	0.96	3.18	186 (1860)	128 (1610)	302 (3800)	3.54	243 (2430)	179 (2250)	307 (3860)	11.1 (1.40)	High coercivity grade
RF-9	1.03	3.07	184 (1840)	127 (1600)	319 (4010)	3.50	242 (2420)	177 (2220)	299 (3760)	11.1 (1.39)	High coercivity grade
RF-10	0.92	3.13	192 (1920)	131 (1650)	317 (3980)	3.51	250 (2500)	186 (2340)	304 (3830)	11.9 (1.49)	High coercivity and high remanence

2. MAGNETIC ORIENTATION POWDER (Sr-Ferrite)

2-1. Powder and Magnetic Properties : Typical value

2-2. APPLICATION : A Case of Injection Molding

(Binder : PA6, Ferrite Content : 90mass%)

Descriptions	Powder's Properties		Magnetic Properties - Compress Method			Melt Flow Rata (MFR)	Magnetic Properties - Injection Molded					Notes / Features
	Average Particle Diameter (APD)	Compressed Density (CD)	Residual Induction (Br)	Coercive Force (HcB)	Intrinsic Coercive Force (HcJ)		Density of Pressing (Dp)	Residual Induction (Br)	Coercive Force (HcB)	Intrinsic Coercive Force (HcJ)	Maximum Energy Product ((BH)max)	
Unit	SI	SI	SI	SI	SI	SI	SI	SI	SI	SI		
Products	μm	g/cm ³	mT (G)	kA/m (Oe)	kA/m (Oe)	g/10min	g/cm ³	mT (G)	kA/m (Oe)	kA/m (Oe)	kJ/m ³ (MGOe)	
OP-71	1.39	3.31	191 (1910)	124 (1560)	201 (2520)	50	3.75	293 (2930)	196 (2460)	224 (2810)	16.7 (2.10)	Old standard grade
SF-500	1.42	3.4	195 (1950)	124 (1560)	195 (2450)	80	3.75	298 (2980)	188 (2360)	208 (2610)	17.4 (2.19)	Standard grade Good balanced properies, for any use
SF-D360	1.48	3.62	202 (2020)	119 (1500)	178 (2240)	100	3.75	300 (3000)	185 (2320)	215 (2700)	17.5 (2.20)	Good fluidty/ High remanence / For high filling Focusing to enhance filling ratio
SF-D630	1.53	3.6	208 (2080)	123 (1550)	173 (2170)	140	3.75	300 (3000)	173 (2170)	193 (2430)	17.5 (2.20)	Good fluidty/ High remanence / For high filling High orientation / Enable magnetization in low field
SF-H470	1.15	3.5	201 (2010)	126 (1580)	216 (2720)	100	3.75	298 (2980)	205 (2580)	255 (3200)	17.3 (2.18)	High coercivity /High remanence in high field orientation
UF-S2	1.3	3.58	200 (2000)	127 (1590)	231 (2900)	130	3.75	299 (2990)	208 (2610)	263 (3310)	17.6 (2.21)	Good fluidity/ High coercivity / For high filling High orientation /High remanence in high filling ratio