Bonded NdFeB

Grade Characteristics

Grade	Alternates
NEOLET 5	BNI 5
NEOLET 6	BNI 6
NEOLET 6R	BNI 5SR
NEOLET 6HR	BNI 6H
NEOLET 7	BNI 7
NEOLET 8	
NEODEX 5	
NEODEX 8	
NEODEX 10	

Grade	Alternates
NEODEX 11	
NEOM 2	
NEOM 4	
NEOM 6	
NEOM 8	
NEOM 8H	
NEOM 10	
NEOM 12	
NEOM 12L	
MSM 2	
MSM 4	GPM 4
MSM 6	GPM 6, BNP 6
MSM 8	GPM 8, BNP 8
MSM 8L	GPM 8L, BNP 8L
MSM 8SR	BNP 8SR
MSM 8H	BNP 8H
MSM 10	GPM 10, BNP 10
MSM 10H	GPM 10H
MSM 12	GPM 12
MSM 12L	
MSM 12D	GPM 12D
MSM 13L	GPM 13L
NEOPELLET 6	
NEOPELLET 6HR	

Grade	Alternates
NEOPELLET 8	

Composition Characteristics

Grade	Process	Binder
NEOLET 5	Injection	Nylon
NEOLET 6	Injection	Nylon
NEOLET 6R	Injection	PPS
NEOLET 6HR	Injection	PPS
NEOLET 7	Injection	Nylon
NEOLET 8	Injection	Nylon
NEODEX 5	Extrusion	Nylon
NEODEX 8	Extrusion	Nylon
NEODEX 10	Extrusion	Nylon
NEODEX 11	Extrusion	Nylon
NEOM 2	Compression	Epoxy
NEOM 4	Compression	Epoxy
NEOM 6	Compression	Epoxy
NEOM 8	Compression	Epoxy
NEOM 8H	Compression	Epoxy
NEOM 10	Compression	Epoxy
NEOM 12	Compression	Epoxy
NEOM 12L	Compression	Epoxy
MSM 2	Compression	Epoxy
MSM 4	Compression	Epoxy

Grade	Process	Binder
MSM 6	Compression	Epoxy
MSM 8	Compression	Epoxy
MSM 8L	Compression	Epoxy
MSM 8SR	Compression	Epoxy
MSM 8H	Compression	Epoxy
MSM 10	Compression	Epoxy
MSM 10H	Compression	Epoxy
MSM 12	Compression	Epoxy
MSM 12L	Compression	Epoxy
MSM 12D	Compression	Epoxy
MSM 13L	Compression	Epoxy
NEOPELLET 6	Compound	Nylon
NEOPELLET 6HR	Compound	PPS
NEOPELLET 8	Compound	Nylon

Magnetic Characteristics

Grade	Br	Br	Hcb	Hcb	Hcj	Hcj	Bhmax	Bhmax
	mT	KGs	Gauss	KA/m	KOe	Oersteds	KOe	KA/m
NEOLET 5	500-560	5.0-5.6	310-390	3.9-4.9	8.0-10.0	640-800	40-52	5.0-6.5
NEOLET 6	520-630	5.2-6.3	340-415	4.2-5.2	8.0-10.0	640-800	48-64	6.0-8.0
NEOLET 6R	450-550	4.5-5.5	310-400	3.9-5.0	7.9-10.0	630-800	36-48	4.5-6.0
NEOLET 6HR	450-550	4.5-5.5	300-360	3.75-4.5	10.6-14.0	850-1110	36-48	4.5-6.0

Grade	Br	Br	Hcb	Hcb	Hcj	Hcj	Bhmax	Bhmax
	mT	KGs	Gauss	KA/m	KOe	Oersteds	KOe	KA/m
NEOLET 7	550-650	5.5-6.5	365-430	4.6-5.4	8.0-10.0	640-800	50-65	6.2-8.2
NEOLET 8	600-675	6.0-6.75	360-420	4.5-5.25	8.0-10.0	640-800	52-72	6.5-9.0
NEODEX 5	450-510	4.5-5.1	280-350	3.5-4.4	8.0-10.0	640-800	34-44	4.0-5.5
NEODEX 8	600-660	6.0-6.6	380-450	4.75-5.6	8.0-10.0	640-800	60-68	7.5-8.5
NEODEX 10	650-700	6.5-7.0	360-450	4.5-5.6	8.0-10.0	640-800	64-80	8.0-10.0
NEODEX 11	650-730	6.5-7.3	410-460	5.1-5.8	8.0-10.0	640-800	66-88	8.5-11.0
NEOM 2	290-370	2.9-3.7	200-277	2.5-3.5	8.0-10.0	640-800	12-28	1.5-3.5
NEOM 4	370-450	3.7-4.5	260-360	3.2-4.5	8.0-10.0	640-800	28-36	3.5-4.5
NEOM 6	440-530	4.4-5.3	280-380	3.5-4.75	8.0-10.0	640-800	32-48	4.0-6.0
NEOM 8	550-650	5.5-6.5	336-432	4.2-5.4	8.0-10.0	640-800	56-68	7.0-8.5
NEOM 8H	590-660	5.5-6.5	400-480	5.0-6.0	11.0-14.0	875-1110	60-76	7.5-9.5
NEOM 10	620-700	6.2-7.0	360-456	4.5-5.7	8.0-10.0	640-800	64-80	8.0-10.0
NEOM 12	700-760	7.0-7.6	424-472	5.3-5.9	8.0-10.0	640-800	80-96	10.0-12.0
NEOM 12L	700-780	7.0-7.8	360-450	4.5-5.6	6.35-8.0	510-640	72-88	9.0-11.0
MSM 2	300-400	3.0-4.0	160-240	2.0-3.0	6.0-8.0	460-640	16-24	2.0-3.0
MSM 4	400-500	4.0-5.0	240-320	3.0-4.0	7.0-9.0	560-720	32-44	4.0-5.5
MSM 6	500-600	5.0-6.0	320-400	4.0-5.0	7.0-9.0	560-720	48-60	6.0-7.5
MSM 8	600-680	6.0-6.8	360-440	4.5-5.5	8.0-10.0	640-800	60-72	7.5-9.0
MSM 8L	600-680	6.0-6.8	400-480	5.0-6.0	8.0-10.0	640-800	64-72	8.0-9.0
MSM 8SR	600-650	6.0-6.5	400-480	5.0-6.0	10.0-14.0	800-1120	60-68	7.5-8.5
MSM 8H	600-650	6.0-6.5	400-480	5.0-6.0	13.0-17.0	1040-1360	60-68	7.5-8.5
MSM 10	680-730	6.8-7.3	400-480	5.0-6.0	8.0-10.0	640-800	76-84	9.5-10.5

Grade	Br	Br	Hcb	Hcb	Hcj	Hcj	Bhmax	Bhmax
	mT	KGs	Gauss	KA/m	KOe	Oersteds	KOe	KA/m
MSM 10H	700-750	7.0-7.5	400-480	5.0-6.0	8.0-10.0	640-800	80-88	10.0-11.0
MSM 12	720-770	7.2-7.7	440-520	5.5-6.5	9.0-11.0	720-880	88-96	11.0-12.0
MSM 12L	780-810	7.8-8.1	400-480	5.0-6.0	6.0-8.0	480-640	88-96	11.0-12.0
MSM 12D	720-770	7.2-7.7	440-520	5.5-6.5	9.0-11.0	720-880	88-96	11.0-12.0
MSM 13L	780-830	7.8-8.3	400-480	5.0-6.0	6.0-8.0	480-640	88-104	11.0-13.0
NEOPELLET 6	540-650	5.4-6.5	340-415	4.2-5.2	8.0-10.0	640-800	44-64	5.5-8.0
NEOPELLET 6HR	540-650	5.4-6.5	340-415	4.2-5.2	8.0-10.0	640-800	44-64	5.5-8.0
NEOPELLET 8	600-675	6.0-6.75	360-420	4.5-5.25	8.0-10.0	640-800	52-72	6.5-9.0

Auxilliary Characteristics

Grade	Saturation Magnetizing Force Hs	Saturation Magnetizing Force Hs	Hk [H@0.9 Br]	Hk [H@0.9 Br]	Recoil Permeability
	kOe	kA/m	kA/m (Squareness).	kOe (Squareness)	D B/D H
NEOLET 5	20	1600	127-255	1.6-3.2	1.2
NEOLET 6	20	1600	127-255	1.6-3.2	1.2
NEOLET 6R	20	1600	127-255	1.6-3.2	1.2
NEOLET 6HR	25	2000	111-247	1.4-3.1	1.2
NEOLET 7	20	1600	127-255	1.6-3.2	1.2
NEOLET 8	20	1600	159-279	2.0-3.5	1.2

Grade	Saturation Magnetizing Force Hs	Saturation Magnetizing Force Hs	Hk [H@0.9 Br]	Hk [H@0.9 Br]	Recoil Permeability
	kOe	kA/m	kA/m (Squareness).	kOe (Squareness)	D B/D H
NEODEX 5	20	1600	111-239	1.4-3.0	1.2
NEODEX 8	20	1600	159-279	2.0-3.5	1.2
NEODEX 10	20	1600	159-279	2.0-3.5	1.2
NEODEX 11	20	1600	159-279	2.0-3.5	1.2
NEOM 2	20	1600	159-279	2.0-3.5	1.2
NEOM 4	20	1600	159-279	2.0-3.5	1.2
NEOM 6	20	1600	159-279	2.0-3.5	1.2
NEOM 8	20	1600	159-279	2.0-3.5	1.2
NEOM 8H	25	2000	159-279	2.0-3.5	1.2
NEOM 10	20	1600	159-279	2.0-3.5	1.2
NEOM 12	20	1600	175-279	2.2-3.5	1.2
NEOM 12L	16	1280	143-239	1.8-3.0	1.2
MSM 2	20	1600	159-279	2.0-3.5	1.2
MSM 4	20	1600	159-279	2.0-3.5	1.2
MSM 6	20	1600	159-279	2.0-3.5	1.2
MSM 8	20	1600	159-279	2.0-3.5	1.2
MSM 8L	20	1600	159-279	2.0-3.5	1.2
MSM 8SR	25	2000	159-279	2.0-3.5	1.2
MSM 8H	30	2400	159-279	2.0-3.5	1.2
MSM 10	20	1600	160-256	1.9-2.7	1.2
MSM 10H	20	1600	160-256	1.9-2.7	1.2

Grade	Saturation Magnetizing Force Hs	Saturation Magnetizing Force Hs	Hk [H@0.9 Br]	Hk [H@0.9 Br]	Recoil Permeability
	kOe	kA/m	kA/m (Squareness).	kOe (Squareness)	D B/D H
MSM 12	20	1600	175-279	2.2-3.5	1.2
MSM 12L	20	1600	143-239	1.8-3.0	1.2
MSM 12D	25	2000	176-256	2.2-3.5	1.2
MSM 13L	20	1600	176-256	2.2-3.5	1.2
NEOPELLET 6	20	1600	127-255	1.6-3.2	1.2
NEOPELLET 6HR	20	1600	127-255	1.6-3.2	1.2
NEOPELLET 8	20	1600	159-294	2.0-3.7	1.2

Thermal Characteristics

Grade	Max Operating Temp	Curie Temp	Rev Temp Coeff
	°C	%/°C	Br (TC a(Br) %/°C)
NEOLET 5	120	350	-0.100
NEOLET 6	120	350	-0.100
NEOLET 6R	150	350	-0.100
NEOLET 6HR	150	350	-0.130
NEOLET 7	120	350	-0.100
NEOLET 8	120	350	-0.100
NEODEX 5	120	350	-0.100
NEODEX 8	120	350	-0.100
NEODEX 10	120	350	-0.100

Grade	Max Operating Temp	Curie Temp	Rev Temp Coeff
	°C	%/°C	Br (TC a(Br) %/°C)
NEODEX 11	120	350	-0.100
NEOM 2	160	350	-0.120
NEOM 4	160	350	-0.120
NEOM 6	160	350	-0.120
NEOM 8	160	350	-0.120
NEOM 8H	180	300	-0.130
NEOM 10	160	350	-0.100
NEOM 12	160	350	-0.100
NEOM 12L	150	320	-0.100
MSM 2	160	350	-0.110
MSM 4	160	350	-0.110
MSM 6	160	350	-0.110
MSM 8	160	350	-0.110
MSM 8L	160	300	-0.120
MSM 8SR	180	300	-0.130
MSM 8H	160	300	-0.120
MSM 10	160	350	-0.100
MSM 10H	160	300	-0.100
MSM 12	160	350	-0.100
MSM 12L	150	320	-0.110
MSM 12D	170	400	-0.080
MSM 13L	150	350	-0.110

Grade	Max Operating Temp	Curie Temp	Rev Temp Coeff
	°C	%/°C	Br (TC a(Br) %/°C)
NEOPELLET 6			-0.100
NEOPELLET 6HR			-0.100
NEOPELLET 8			-0.100

Mechanical/Physical Characteristics

Grade	Density	Electrical Resistance	Shearing Strength	Tensile ASTM-D638	Hardness
	g/cm3	lbs/in2	OHM cm	%	C
NEOLET 5	5.0-5.5	0.017	80	57	90-130
NEOLET 6	5.0-5.5	0.017	80	57	90-130
NEOLET 6R	5.0-5.5	0.017	80	57	90-130
NEOLET 6HR	5.0-5.5	0.017	80	57	90-130
NEOLET 7	5.2-5.7	0.017	80	57	90-130
NEOLET 8	5.5-5.8	0.017	80	57	90-130
NEODEX 5	5.5-5.8	0.020	80	41	100-150
NEODEX 8	5.5-5.8	0.020	80	41	100-150
NEODEX 10	5.8-6.1	0.020	80	41	100-150
NEODEX 11	5.8-6.1	0.020	80	41	100-150
NEOM 2	5.7-6.1	0.026	50		80-120
NEOM 4	5.8-6.2	0.026	50		80-120
NEOM 6	5.8-6.2	0.026	50		80-120

Grade	Density	Electrical Resistance	Shearing Strength	Tensile ASTM-D638	Hardness
	g/cm3	lbs/in2	OHM cm	%	C
NEOM 8	5.9-6.3	0.026	50		80-120
NEOM 8H	6.0-6.4	0.026	50		80-120
NEOM 10	5.9-6.3	0.026	50		80-120
NEOM 12	6.0-6.4	0.026	50		80-120
NEOM 12L	6.0-6.4	0.026	50		80-120
MSM 2	4.5-5.0	0.026	50		40-45
MSM 4	5.2-5.7	0.026	50		40-45
MSM 6	5.5-6.0	0.026	50		40-45
MSM 8	5.8-6.1	0.026	50		35-38
MSM 8L	5.8-6.1	0.026	50		35-38
MSM 8SR	5.8-6.1	0.026	50		35-38
MSM 8H	5.8-6.1	0.026	50		35-38
MSM 10	5.8-6.1	0.026	50		35-38
MSM 10H	6.0-6.3	0.026	50		35-38
MSM 12	6.0-6.3	0.026	50		35-38
MSM 12L	6.0-6.3	0.026	50		35-38
MSM 12D	6.0-6.3	0.026	50		35-38
MSM 13L	6.1-6.4	0.026	50		35-38
NEOPELLET 6	5.0-5.5	0.014	80	30	15-35
NEOPELLET 6HR	5.0-5.5	0.014	80	30	15-35
NEOPELLET 8	5.5-5.8	0.014	80	30	15-35


International
Magnaproducts,
Incorporated

MSDS

Section 1 - Product Name

Product Name: Bonded Neodymium Compression

Section 2 - Hazardous Ingredients

Chemical Name: Bonded Neodymium Compression

Material/Component(s):

Material or Component	Weight %	CAS No.	ACGUH TLV (mg/m^3)	Notes

Section 3 - Physical Characteristics

Vapor Pressure: N/A
Vapor Density: N/A
Specific Gravity: 5.9
Melting Point: N/A
Evaporation Rate: N/A
Odor: odorless
Solubility in Water: NIL

Section 4 - Fire and Explosion Hazard Data

Flash Point: N/A
FLAMMABLE LIMITS: N/A
LEL: N/A
UEL: N/A
Extinguishing Media: Dry chemicals for fighting magnesium or metal fires
Special Fire Fighting Procedures: Isolate and contain burning materials. Smother with argon gas or non-reacting dry chemicals. Avoid Water. Do not use halon.
Unusual Fire and Explosion Hazards(s): For solid dense magnet: none. Powders from chipping, crushing, grinding, slicing, etc. May ignite spontaneously and burn intensely.

Section 5 - Reactivity Data

Stability: Stable

Conditions to Avoid: N/A
Incompatibility (Materials to Avoid): Acids, Highly active oxidizers
Hazardous Polymerization: Will not Occur
Hazardous Decomposition or Byproducts : Hydrogen may be released when powers react with water.

Section 6 - Health Hazard Data

Health Hazards (Acute & Chronic): Entry through skin injuries may irritate and produce granulomes

Emergency and First Aid Procedures:

Procedure For	Procedure

Section 7 - Precautions for Safe Handling and Use

Spill Procedure: Fine chips and powders should be gathered up by damp mop or broom. Do not use vacuum cleaner.
Waste Disposal Method: May be sent to a sanitary landfill, reclamation.

Section 8 - Control Measures

Respiratory Protection: Powders may ignite and burn. store under inert gas or vacuum.
Eye Protection: USE
Skin Protection: Protection Gloves
Ventilation: N/A
Work / Hygienic Practices: Avoid skin injuries. If powders are generated or handled, train workers in safe practices for combustible powders. Magnetized pair are strongly attracted to each other and to steel - Handle firmly to avoid injury - causing impacts.