CERMAG LTD
92/94 Holywell Road Sheffield S4 8AS
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MATERIAL DATA SHEET

Revision Date – 01/06/2026
Revision Number – 4
Material/Trade Name – Ceramic / Ferrite

1 - Substance Identification

Material/Trade Name -	Ceramic / Ferrite
Material Type -	Strontium or Barium
Company -	Cermag Ltd
Address -	92/94 Holywell Road Sheffield S48AS
Telephone -	0114 2446136
Fax -	0114 2561769
Emergency Telephone -	

2a – Ceramic 1 - Composition Weight %

Substance -	Fe_2O_3	80-88.2%
	SrO	8.5-9.3%
	CaO	0.4-0.6%
	Al_2O_3-2SiO_2-2H_2O	0.3-0.5%

2b – Ceramic 5 - Composition Weight %

Substance -	Fe_2O_3	80-88.2%
	SrO	8.5-9.3%
	CaO	0.4-0.6%
	Al_2O_3-2SiO_2-2H_2O	0.3-0.5%

2c – Ceramic 8 - Composition Weight %

Substance -	Fe_2O_3	80-88.2%
	SrO	8.5-9.3%
	CaO	0.4-0.6%
	Al_2O_3-2SiO_2-2H_2O	0.3-0.5%

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2d – Ceramic 8C - Composition Weight %

Substance -	Fe_2O_3	80-88.2%
	SrO	8.5-9.3%
	CaO	0.4-0.6%
	Al_2O_3-$2SiO_2$-$2H_2O$	0.3-0.5%

3 – REACH

Ferrite / Ceramic materials contain no SVHC (Substances of Very High Concern) either in ingredients or in preparation

4 – Hazard Identification

Strontium Hexaferrite is not listed in EH40 Occupational Exposure Limits or other listings of hazardous or toxic materials.
The handling of Strontium Hexaferrite magnets in the clean unmagnetised state causes no hazards to health. Hazards arise when they are ground or magnetised
Fine powders and grinding slurry may cause irritation to eyes, skin & respiratory systems.
Only trained personnel should handle magnetised magnets.
Food & drink should be prohibited in the vicinity of the machining and linishing operation.

Flash Point - None

5 – First Aid Measures

Inhalation -	Remove to fresh air area Inform first aider
Eyes -	Flush dust from eyes with water Inform first aider
Skin -	Wash with soap & water Inform first aider
Ingestion -	Give plenty of water to drink Do not induce vomiting Inform first aider

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6 – Fire Prevention

Non Combustible

7 – Handling & Storage of Magnetised Products

Due care should be taken when handling fully magnetised material as physical injury may occur through entrapment of body parts caused by the inadvertent attraction of magnetised material to other similar or ferro-magnetic material.

Close proximity to the magnetic field from magnetised material may effect the operation of heart pacemakers.

8a – Properties (Magnetic)

	Br (Gauss)	bHc (Oersted)	iHc (Oersted)	BH Max (MGO)	Magnetising Force (Oersted)
Ceramic 1	2,200	1,700	2,750	1.0	7,500
Ceramic 5	4,000	2,000	2,300	3.5	10,000
Ceramic 8	3,700	2,800	2,950	3.3	10,000
Ceramic 8C	4,300	2,500	2,550	4.3	10,000

8b – Properties (Thermal)

	Reversible Temperature Coefficient of Br (%change/°C)	Curie Temperature (°C)	Maximum Working Temp (°C)
Ceramic 1	-0.2	450	350
Ceramic 5	-0.2	450	350
Ceramic 8	-0.2	450	350
Ceramic 8C	-0.2	450	350

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8c – Properties (Physical)

	Density (g/cm^3)	Tensile Strength (PSI)	Modulus of elasticity (PSI)	Hardness (Mohs)	Coefficient of thermal expansion (10^{-6}per °C)	Electrical Resistivity at 20°C (Ohm-cm x 10^{-6})
Ceramic 1	4.9	5000	9000	7	10	10
Ceramic 5	4.9	5000	9000	7	10	10
Ceramic 8	4.9	5000	9000	7	10	10
Ceramic 8C	4.9	5000	9000	7	10	10

9 – Stability and Reactivity

Stable at all temperatures
Avoid moist atmospheres

10 – Disposal Considerations

Do not dispose into watercourses
Use only licensed contractors
Dispose in accordance with Special Waste Regulations 1996

11 – Transport Information

Not Classified as Hazardous for Transportation by air. Magnetic fields within 0.00525gauss at 15 feet, as legislation states.
This data sheet needed is to accompany our commercial invoice with freight.

12 – Regulatory Information

1 – Risk & Safety - Avoid Entrapment of Body Parts
Dispose of material in a safe way

2 – Other Regulations - Health & Safety at Work Act 1974
Environmental protection Act 1990
Special Waste Regulations 1996