

MATERIAL SAFETY DATA SHEET

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SECTION 1. PRODUCT DESCRIPTION

CERAMIC PERMANENT MAGNET

GRADE	CHEMICAL FORMULA	COMPOSITION				
		Sr	Ba	Fe	Al	Si
Ceramic 3	$Ba Fe_{12} O_{19}$	--	6-8	BAL.	--	--
Ceramic 4, 5, and 8	$SrO 6Fe_2O_3$	8-10	--	BAL.	L.T.	1.0 L.T. 1.0

The product presents no health hazard unless it is cut or machined. These procedures may produce hazardous amounts of dusts. Such operations should be evaluated to determine if a hazard exists.

SECTION 2. INGREDIENTS AND HAZARDS

CAS NO.	ELEMENT	SYMBOL	ACGIH TLV * (mg/m ³)	AIR CONTAMINATION
1314-11-0	Strontium (as SrO)	Sr	**	--
1304-28-5	Barium (as BaO) (Soluble Compounds)	Ba	0.5	--
1309-37-1	Iron	Fe	10.0 5.0	Total dust Respirable dust
7429-90-5	Aluminum	Al	10.0 5.0	Total dust Respirable dust
7440-21-3	Silicon	Si	10.0 5.0	Total dust Respirable dust

* American Conference of Governmental Industrial Hygienists 1985-86.
 Threshold limit values (TLV) based on an 8 hour day, 40 hour week.

** No established ACGIH TLV.

SECTION 3. PHYSICAL DATA

Specific gravity: 4.5 to 4.9
 Appearance and odor: Metallic dark gray; no odor
 Melting point: N/A
 Solubility: Not soluble

SECTION 4. FIRE AND EXPLOSION DATA

Product is not combustible. Fine powders produced by dry grinding or machining may produce dusts which may cause an explosive hazard. Control dust levels by utilizing wet machining or grinding processes, local exhaust ventilation and good housekeeping.

SECTION 5. REACTIVITY

Product is not reactive.

SECTION 6. HEALTH HAZARDS

Primary route of entry: Inhalation of generated airborne dusts. Any long-term exposure to dusts exceeding recommended TLV levels may result in irritation to upper respiratory tract. Dusts in eyes may cause irritation. Flush eyes with water. Use good personal hygiene. Avoid ingestion of dusts by not eating, drinking or smoking in areas where dusts are generated. Magnets are brittle and may fracture or chip. Wear safety glasses or goggles.

SECTION 7. WASTE DISPOSAL

Dusts or fine scrap may be vacuumed or swept wet to keep airborne dust concentrations to a minimum. Dispose in accordance with federal, state and local regulations.

SECTION 8. SPECIAL PROTECTION INFORMATION

Parts that are magnetized may create personal hazard due to chipping, shattering or pinching on impact. Wear gloves when handling parts where sharp edges or possibility of breaking/cracking is great. Wear safety glasses or goggles when cutting/grinding magnets or where magnets may be subject to breaking. Use NIOSH approved dust mask when dry grinding/cutting materials.

SECTION 9. SPECIAL PRECAUTIONS AND COMMENTS

Use good manufacturing and housekeeping practices that will keep generated dusts to a minimum. Use personal protective equipment when required. Use good personal hygiene practices.