

MATERIAL SAFETY DATA SHEET



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DISCLAIMER

This data sheet is based on OSHA FORM 20 but modified to more adequately suit refractory products. All data are subject to reasonable variation. This information is supplied in good faith by Harbison-Walker and is applicable to the product as shipped. Your application of the product may change its characteristics. THE DATA PROVIDED HEREIN ARE BELIEVED CORRECT OR ARE OBTAINED FROM SOURCES BELIEVED TO BE GENERALLY RELIABLE. HARBISON-WALKER SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE DIRECTLY OR INDIRECTLY ARISING FROM THE USE OF THIS PRODUCT, AND HARBISON-WALKER ASSUMES NO OBLIGATION OR LIABILITY FOR RELIANCE ON THE INFORMATION CONTAINED IN THIS DATA SHEET. This data is not part of any contract or condition of sale. It is solely supplied as an accomodation to the buyer.

SECTION I - PRODUCT IDENTIFICATION

Product Tradename:

CALAMO 50

Type of Refractory:*

Calcined Fireclay

*For chrome containing refractories, indicate approximate percentage _____, and check applicable block.

- Contains chrome ore consisting predominantly of the mineral chromite (MgFe).O.(AlFeCr)₂O₃
 Contains chromium III oxide

SECTION II - HAZARDOUS INGREDIENTS

SEE CHECKED BLOCKS INGREDIENT	GEN. CHEM. FORMULA	C.A.S. NUMBER	PERCENTAGE RANGE	OSHA P.E.L.	ACGIH TLV®	NIOSH CRITERIA DOCUMENT NO.
<input type="checkbox"/> Quartz	SiO ₂	001317799	18 - 22%	10 mg/m ³ % Respirable Quartz +2	SAME	75-120
<input checked="" type="checkbox"/> Cristobalite	SiO ₂	14464-46-1		½ Quartz Value	SAME	75-120
<input type="checkbox"/> Tridymite	SiO ₂	15468-32-3		½ Quartz Value	SAME	75-120
<input type="checkbox"/> Fused Silica	SiO ₂	007631869		NONE	Use Quartz TLV	75-120
<input type="checkbox"/> Coal Tar Products	N/A	MX8001589		0.2 mg/m ³	SAME	78-107
<input type="checkbox"/> Petroleum Pitch	N/A	MX8052424		NONE	5.0 mg/m ³	78-106
<input type="checkbox"/> Phosphoric Acid	H ₃ PO ₄	007664382		1.0 mg/m ³ (mist)	SAME	NONE
<input type="checkbox"/> Lime	CaO	001305788		5.0 mg/m ³	2.0 mg/m ³	NONE
<input type="checkbox"/> Sodium Silicate	03-Si .2Na	006834920		NONE	NONE	NONE
<input type="checkbox"/>						
<input type="checkbox"/>						
<input type="checkbox"/>						

SECTION III - PHYSICAL DATA

Appearance and Odor: Buff to gray color; no odor.

Specific Gravity: 1.60

pH: ND

Solubility in Water: Insoluble.

Soluble Constituents:

Other:

SECTION IV - FIRE AND EXPLOSION DATA

UNLESS OTHERWISE NOTED, NONE. Product is a refractory.

NOTES:

SECTION V - HEALTH HAZARD DATA*

*SEE CHECKED BLOCKS INGREDIENT		EFFECTS OF OVEREXPOSURE	EXPOSURE REQUIRED	
			PROLONGED	SHORT TERM
<input checked="" type="checkbox"/>	Free Crystalline Silica	Delayed lung fibrosis - silicosis	✓	
<input checked="" type="checkbox"/>	Coal Tar Products	Skin, lung, mucous membrane carcinogen	✓	
		Skin irritation; photosensitization		✓
<input checked="" type="checkbox"/>	Petroleum Pitch	(Same as Coal Tar Products)		
<input checked="" type="checkbox"/>	Lime	Irritant to skin, eyes, mucous membranes, etc.		✓
<input checked="" type="checkbox"/>	Phosphoric Acid	Primary Irritant - skin, eyes, etc.		✓
<input checked="" type="checkbox"/>	Sodium Silicate	Irritant to skin, eyes, mucous membranes, etc.		✓
<input type="checkbox"/>				
<input type="checkbox"/>				

EMERGENCY OR FIRST AID PROCEDURES:

- Irritants: Wash from skin or flush from eyes using copious amounts of water.
- Coal Tar Products: Remove from skin by washing with soap and water. DO NOT use solvents. Same for petroleum pitch.
- Other:

SECTION VI - REACTIVITY DATA

STABILITY: STABLE UNSTABLE

Incompatibility (materials to avoid)

Hazardous decomposition products:

Hazardous Polymerization: may occur will not occur

COMMENTS:

SECTION VII - SPILL AND LEAK PROCEDURES

Most refractory products may be landfilled. However, since your application of this product may change its chemical characteristics, and since disposal procedures may vary with locale and are subject to change, you should consult the governmental authority having jurisdiction for disposal information.

COMMENTS:

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (CHECK TYPE): Approved Dust Other (Specify):

VENTILATION: Local exhaust ventilation should be provided if routine operation generates dust in excess of allowable limits

PROTECTIVE GLOVES (CHECK TYPE): Acid Resistant Impermeable Abrasion Resistant Other (Specify):

EYE PROTECTION: Approved safety glasses, goggles or faceshields should be used when handling refractory products.

FOOT PROTECTION (CHECK TYPE): Metatarsal safety Impermeable

PROTECTIVE CLOTHING (SPECIFY):

SECTION IX - SPECIAL PRECAUTIONS

- If block is checked, product contains coal tar products. Workers should not be exposed to furnace "burn-in" volatiles
- Other (Specify):