

September 10, 1984

CHROMIX-M

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

Form Approved
OMB No. 44-R1387

MATERIAL SAFETY DATA SHEET

Required under USDL Safety and Health Regulations for Ship Repairing,
Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

SECTION I

MANUFACTURER'S NAME QUIGLEY COMPANY, INC.		EMERGENCY TELEPHONE NO. (212) 573-3444
ADDRESS (Number, Street, City, State, and ZIP Code) 235 E. 42nd STREET, NEW YORK, NY 10017		
CHEMICAL NAME AND SYNONYMS N/A		TRADE NAME AND SYNONYMS CHROMIX-M
CHEMICAL FAMILY CHROMITE	FORMULA N/A	

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					
HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES				%	TLV (Units)

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	N/A	SPECIFIC GRAVITY (H ₂ O=1)	3.1
VAPOR PRESSURE (mm Hg.)	N/A	PERCENT. VOLATILE BY VOLUME (%)	N/A
VAPOR DENSITY (AIR=1)	N/A	EVAPORATION RATE (_____ = 1)	N/A
SOLUBILITY IN WATER	NIL		
APPEARANCE AND ODOR	STIFF PASTE - NO ODOR		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	N/A	FLAMMABLE LIMITS	N/A	LEL	UEL
EXTINGUISHING MEDIA	N/A				
SPECIAL FIRE FIGHTING PROCEDURES	NOT COMBUSTIBLE				
UNUSUAL FIRE AND EXPLOSION HAZARDS	NONE				

PLASTIC & RAMMING MIX

Description:

Service Limit:

2900°F (one sided heating) Packaging: 100 lb. boxes

Chemical Analysis:

Typical*		
Cr ₂ O ₃	-	22.5
MgO	-	9.2
CaO	-	0.2
SiO ₂	-	24.2
Al ₂ O ₃	-	27.6
Fe ₂ O ₃	-	14.4
TiO ₂	-	0.7
Alkalies	-	1.2

*on ignited basis

Typical
Physical
Properties:

(as determined on RAMMED specimens, ASTM methods where applicable)

Fired to (°F)	Density (Lbs./Cu.Ft.)	Linear Change, (%)	Modules of Rupture, (psi)	Cold Crushing Strength, (psi)
	RAMMED	RAMMED	RAMMED	RAMMED
500	155 - 163	0 to -0.3	970 - 1270	860 - 1130
1500	154 - 160	+0.1 to +0.4	700 - 825	340 - 380
2500	158 - 168	-0.4 to -0.7	980 - 1360	880 - 950
2700	152 - 158	+0.2 to +0.4	790 - 850	1000 - 1075

Application Methods:

Material required to Ram 1 cubic ft. is 150 - 170 lbs.

* Quoted from the Copyright January 1965 and this is retained



QUIGLEY COMPANY INC.

a subsidiary of Pfizer Inc.

235 EAST 42nd STREET NEW YORK, N. Y. 10017

ASARCO ELP 0000028

SECTION V - HEALTH HAZARD DATA	
THRESHOLD LIMIT VALUE	STIFF PASTE - NO TLV
EFFECTS OF OVEREXPOSURE	May cause eye and skin irritation to those with sensitive skin, and/or irritation in respiratory tract.
EMERGENCY AND FIRST AID PROCEDURES	Wash from skin with soap and water. Flush out eyes with generous amounts of water. If irritation persists, get medical attention.

SECTION VI - REACTIVITY DATA			
STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	None
INCOMPATIBILITY (Materials to avoid)	None		
HAZARDOUS DECOMPOSITION PRODUCTS	None		
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	None

SECTION VII - SPILL OR LEAK PROCEDURES	
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED	
Normal Clean-up Procedures.	
Vacuum cleaning systems are recommended, where applicable.	
WASTE DISPOSAL METHOD	
Disposal must be made in accordance with Federal, State, and Local regulations.	

SECTION VIII - SPECIAL PROTECTION INFORMATION			
RESPIRATORY PROTECTION (Specify type)			
None			
VENTILATION	LOCAL EXHAUST	None	SPECIAL
	MECHANICAL (General)	None	OTHER
PROTECTIVE GLOVES		EYE PROTECTION	
Leather or Rubber Gloves		Safety Glasses or Goggles, where	
OTHER PROTECTIVE EQUIPMENT		None	
		Appropriate.	

SECTION IX - SPECIAL PRECAUTIONS	
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING	
Store in cool, dry, place.	
OTHER PRECAUTIONS	

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Legal responsibility is assumed only for the fact that all studies reported here and all opinions are those of qualified experts.

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