

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

Form Approved
OMB No. 48-R1287

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 CHEM-CLAY CORP., STANDARD CERAMIC SUPPLY DIV.		EMERGENCY TELEPHONE NO. 412-276-4333
ADDRESS (Number, Street, City, State, and ZIP Code) P.O. BOX 4435, PITTSBURGH, PA. 15205		
CHEMICAL NAME AND SYNONYMS Modified lead borosilicate glass.		TRADE NAME AND SYNONYMS Lead bearing Enamels
CHEMICAL FAMILY Modified lead borosilicate glass.		PENICILLIN Lead bearing Enamels

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					
			Range	%	TLV (Units)
Present in all Enamels		PbO	*40-50%	0.15	as Pb
Present in all Enamels		B ₂ O ₃	0-5%	10	
Present in Opaque Reds and Orange		Cd	0-4%	0.05	as Cd
Present in all Opaques		As ₂ O ₃	0-4%	0.05	as As
*oxide weight equivalents of frit components					

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	N.A.	SPECIFIC GRAVITY (H ₂ O=1)	2.6
VAPOR PRESSURE (mm Hg.)	N.E.	PERCENT VOLATILE BY VOLUME (%)	0%
VAPOR DENSITY (AIR=1)	N.E.	EVAPORATION RATE (----- *1)	0%
SOLUBILITY IN WATER	Insoluble		
APPEARANCE AND ODOR	Solid, odorless powder		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	Not flammable	FLAMMABLE LIMITS	LEL	UEL
EXTINGUISHING MEDIA				
SPECIAL FIRE FIGHTING PROCEDURES				
MELTING POINT ABOUT 1200°F				
UNUSUAL FIRE AND EXPLOSION HAZARDS				

COLORED CRYSTALS - LEAD BEARING
5602 / 5606 / 5607 / 5608 / 5609 / 5610

SECTION V - HEALTH HAZARD DATA		
THRESHOLD LIMIT VALUE	See Section II	As (0.50) Pb (0.15) Cd (0.05)
EFFECTS OF OVEREXPOSURE Repeated and prolonged inhalation may cause delayed injury.		
EMERGENCY AND FIRST AID PROCEDURES		

SECTION VI - REACTIVITY DATA			
STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	
INCOMPATIBILITY (Materials to avoid)			
HAZARDOUS DECOMPOSITION PRODUCTS			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	
CARCINOGEN Cd in REDS AND CADMIUM YELLOWS			

SECTION VII - SPILL OR LEAK PROCEDURES	
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED If material is not contaminated, scoop into a clean container for use. If contaminated, scoop or vacuum into a receptacle for disposal.	
WASTE DISPOSAL METHOD Sanitary landfill in accordance with local, state, and federal regulations.	

SECTION VIII - SPECIAL PROTECTION INFORMATION		
RESPIRATORY PROTECTION (Specify type) NIOSH/MESA approved 3M Brand 9920 or equivalent		
VENTILATION	LOCAL EXHAUST Recommended	SPECIAL
	MECHANICAL (General)	OTHER
PROTECTIVE GLOVES	Recommended	EYE PROTECTION Protection against dust particles is recommended
OTHER PROTECTIVE EQUIPMENT		

SECTION IX - SPECIAL PRECAUTIONS	
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING Avoid breathing dust. Keep container closed. Use with adequate ventilation.	
OTHER PRECAUTIONS Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.	