

# MATERIAL SAFETY DATA SHEET

## SECTION I PRODUCT INFORMATION

MANUFACTURER: THE POTTERY SUPPLY HOUSE LTD.  
ADDRESS: 1120 SPEERS ROAD  
OAKVILLE, ONTARIO L6L 2X4  
SUPPLIER: THE POTTERY SUPPLY HOUSE LTD. TEL: 1 800 465-8544  
ADDRESS: 1120 SPEERS ROAD 905 849-5540  
OAKVILLE, ONTARIO L6L 3X4 FAX: 905 849-0001  
MATERIAL NAME: **RED LEADLESS EARTHENWARE GLAZE**  
MATERIAL USE: CERAMIC DECORATING GLAZE

## SECTION II HAZARDOUS INGREDIENTS

INGREDIENT	%	C.A.S.#	LD50 (ORAL, RAT)	LC50
<b>FRIT,*</b> CONTAINING FUSED OXIDES OF:	<b>30 - 60</b>	<b>65997-18-4</b>	<b>NOT AVAILABLE</b>	<b>NOT AVAILABLE</b>
ALUMINUM	3 - 7	1344-28-1	N.A.	N.A.
SODIUM	1 - 5	12401-86-4	N.A.	N.A.
CALCIUM	3 - 7	1305-78-8	N.A.	N.A.
SILICON (AMORPHOUS)	10 - 30	60676-86-0	N.A.	N.A.
BORON	7 - 13	1303-86-2	N.A.	N.A.
<b>RED STAIN*</b>	<b>1 - 5</b>		<b>N.A.</b>	<b>N.A.</b>
CONTAINING:				
ZIRCONIUM OXIDE	-----	1314-24-4	N.A.	N.A.
CADMIUM COMPOUND (CdSeS)	-----	7440-43-9	N.A.	N.A.
SILICON DIOXIDE	-----	14808-60-7	N.A.	N.A.

\*A FUSED SILICATE COMPOUND CONTAINING REPORTABLE OXIDES. FORMED BY HIGH TEMPERATURE FUSION OR CALCINATION, IT MAY NOT EXHIBIT ANY OF THE PROPERTIES OF THE METAL COMPOUNDS LISTED.

## SECTION III PHYSICAL DATA

PHYSICAL STATE: LIQUID/SOLID SUSPENSION.  
ODOUR / APPEARANCE: OPAQUE, PINK-RED FLUID WITH MILD ODOUR.  
ODOUR THRESHOLD: NOT AVAILABLE  
SPECIFIC GRAVITY: APPROXIMATELY 1.60  
VAPOUR PRESSURE: NOT AVAILABLE  
VAPOUR DENSITY: NOT AVAILABLE  
EVAPORATION RATE: NOT AVAILABLE  
BOILING POINT: NOT AVAILABLE  
FREEZING POINT: APPROXIMATELY 0° C (WATER)  
PH: NOT AVAILABLE  
COEFF. WATER/OIL  
DISTRIBUTION: NOT AVAILABLE

## SECTION IV FIRE OR EXPLOSION HAZARD

CONDITIONS OF FLAMMABILITY: NOT FLAMMABLE  
MEANS OF EXTINCTION: NOT APPLICABLE  
FLASHPOINT, METHOD OF DETERMINATION: NOT APPLICABLE  
UPPER FLAMMABLE LIMIT: NOT APPLICABLE  
LOWER FLAMMABLE LIMIT: NOT APPLICABLE  
AUTO-IGNITION TEMPERATURE: NOT APPLICABLE  
HAZARDOUS COMBUSTION PRODUCTS: TOXIC METAL FUMES MAY BE EVOLVED IN A FIRE. VERY SMALL QUANTITIES (<1%,TOTAL) OF CARBON DIOXIDE, CARBON MONOXIDE, HYDROCHLORIC ACID, FORMALDEHYDE, AND NO<sub>x</sub>/SO<sub>x</sub> VAPOURS MAY BE LIBERATED IN A FIRE.  
EXPLOSION DATA,  
SENSITIVITY TO MECHANICAL IMPACT: NONE  
SENSITIVITY TO STATIC DISCHARGE: NONE

## SECTION V REACTIVITY DATA

CONDITIONS UNDER WHICH PRODUCT IS CHEMICALLY UNSTABLE  
NAME OF INCOMPATIBLE SUBSTANCES: ACIDIC ACIDS  
CONDITIONS OF REACTIVITY: NONE KNOWN  
HAZARDOUS DECOMPOSITION PRODUCTS: TOXIC FUMES MAY BE RELEASED DURING FIRING

## SECTION VI TOXICOLOGICAL PROPERTIES

ROUTE OF ENTRY: SKIN CONTACT:	POSSIBLE IRRITANT.
SKIN ABSORPTION:	UNLIKELY
EYE CONTACT:	POSSIBLE IRRITANT.
INHALATION:	POSSIBLE IRRITANT.
INGESTION:	MAY BE HARMFUL IF SWALLOWED.
EFFECTS OF ACUTE EXPOSURE:	CONTACT WITH EYES, SKIN AND RESPIRATORY TRACT MAY CAUSE PHYSICAL IRRITATION AND INFLAMMATION.
EFFECTS OF CHRONIC EXPOSURE:	RESPIRABLE DUST OR MIST MAY CAUSE SKIN, EYE AND RESPIRATORY IRRITATION DUE TO THE PHYSICAL NATURE OF THE PARTICULATES. REPEATED AND PROLONGED BREATHING OF THESE PARTICULATES MAY CAUSE COUGHING, WHEEZING, IMPAIRED LUNG FUNCTION AND INCREASED SPUTUM PRODUCTION. SMOKING AGGRAVATES THESE EFFECTS. OVEREXPOSURE TO CADMIUM MAY CAUSE KIDNEY DAMAGE THROUGH INGESTION OR INHALATION, LUNG DISEASE THROUGH INHALATION AND BONE DISEASE IF HIGH LEVELS ARE INGESTED. THE CADMIUM IN THIS PRODUCT IS ENCAPSULATED WITHIN A PROTECTIVE ZIRCONIUM SILICATE MATRIX. OVEREXPOSURE TO RESPIRABLE CRYSTALLINE SILICA DUST MAY CAUSE: 1/ SILICOSIS, A FORM OF PROGRESSIVE PULMONARY FIBROSIS. 2/ SCLERODERMA, AN IMMUNE SYSTEM DISORDER MANIFESTED BY A FIBROSIS OF THE LUNGS, SKIN AND OTHER INTERNAL ORGANS. SILICOSIS INCREASES THE RISK OF TUBERCULOSIS. RECENT EVIDENCE SUGGESTS AN ASSOCIATION BETWEEN RESPIRABLE EXPOSURE AND A HIGHER INCIDENCE OF KIDNEY LESIONS. CRYSTALLINE SILICA INHALED FROM OCCUPATIONAL SOURCES IS CLASSIFIED (IARC) AS CARCINOGENIC TO HUMANS.
EXPOSURE LIMITS - TIME WEIGHTED AVERAGE EXPOSURE VALUES (TWA EV):	<b>GLAZE FRIT: NOT ESTABLISHED</b> AS COMPONENT OXIDES: <b>CALCIUM 2.0 mg./m<sup>3</sup></b> <b>ALUMINUM 10.0 mg./m<sup>3</sup></b> <b>FUSED SILICON 0.1 mg./m<sup>3</sup></b> <b>BORON 10.0 mg./m<sup>3</sup></b> <b>SODIUM N/A</b> <b>RED STAIN: NOT ESTABLISHED</b> AS COMPONENT OXIDES: <b>ZIRCONIUM OXIDE 5.0 mg./m<sup>3</sup></b> <b>CADMIUM COMPOUND 0.01 mg./m<sup>3</sup></b> <b>SILICON DIOXIDE 0.1 mg./m<sup>3</sup></b>
IRRITANCY OF PRODUCT:	REFER TO ROUTE OF ENTRY
SENSITIZATION OF PRODUCT:	NO KNOWN EFFECTS
CARCINOGENICITY OF PRODUCT:	THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) HAS CONCLUDED THAT CADMIUM AND CADMIUM COMPOUNDS ARE CARCINOGENIC TO HUMANS. ZIRCONIUM OXIDE CONTAINS TRACE AMOUNTS OF NATURALLY OCCURRING URANIUM AND THORIUM; INHALATION OF RESPIRABLE DUSTS MAY CAUSE LUNG CANCER. SEE ALSO EFFECTS OF CHRONIC EXPOSURE.
TERATOGENICITY OF PRODUCT:	NO KNOWN EFFECTS
MUTAGENICITY OF PRODUCT:	NO KNOWN EFFECTS
SYNERGISTIC MATERIALS:	NONE KNOWN

## SECTION VII PREVENTATIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT TO BE USED:	THIS PRODUCT HAS BEEN SPECIFICALLY FORMULATED FOR BRUSH APPLICATION. USERS WHO APPLY BY SPRAYING ARE ADVISED TO WEAR SAFETY GLASSES AND AN APPROPRIATE RESPIRATOR (REFER TO EXPOSURE LIMITS). USERS WHO APPLY BY DIPPING ARE ADVISED TO WEAR RUBBER GLOVES TO PREVENT SKIN IRRITATION.
ENGINEERING CONTROLS TO BE USED:	NONE FOR BRUSH APPLICATION. THE USE OF VENTILATING EQUIPMENT IS RECOMMENDED FOR SPRAY APPLICATION. THIS PRODUCT CONTAINS CELLULOSE GUM (~1%) AND A PRESERVATIVE (<0.1%). ABOVE 227°C, CARBON MONOXIDE, CARBON DIOXIDE AND SMOKE ARE RELEASED AS THE GUM IS BURNT OFF. HYDROCHLORIC ACID, FORMALDEHYDE, SO <sub>x</sub> AND NO <sub>x</sub> VAPOURS MAY BE LIBERATED WHEN THE PRESERVATIVE IS FIRED OUT. AT HIGH TEMPERATURES, METAL FUMES MAY BE LIBERATED. <b>WHEN FIRING, USE A DOWNDRAFT OR OVERHEAD HOOD-TYPE EXHAUST.</b>

## SECTION VII PREVENTATIVE MEASURES, CONTINUED

PROCEDURES TO BE FOLLOWED IN CASE OF SPILL:	CLEAN UP WITH SPONGE OR SPATULA. CAUTION: SPILLS ARE SLIPPERY.
WASTE DISPOSAL:	IN ACCORDANCE WITH LOCAL, PROVINCIAL AND FEDERAL LAWS. DO NOT EMPTY INTO WATER COURSES.
HANDLING PROCEDURES:	AVOID GENERATING MIST OR DUST. MAINTAIN GOOD PERSONAL HYGIENE. DO NOT EAT, DRINK OR SMOKE. WASH AFTER USE.
STORAGE REQUIREMENTS:	DO NOT STORE NEAR FOODSTUFFS.
SPECIAL SHIPPING INFORMATION:	NONE

## SECTION VIII FIRST AID MEASURES

EYE EXPOSURE: FLUSH THOROUGHLY WITH WATER FOR 15 MINUTES. SEEK MEDICAL ATTENTION IF IRRITATION PERSISTS.  
SKIN EXPOSURE: WASH THOROUGHLY AND APPLY MOISTURIZING HANDCREAM, AS NEEDED, TO DRIED, REDDENED SKIN.  
INGESTION: GIVE MILK OR WATER. DO NOT INDUCE VOMITING IF PERSON IS UNCONSCIOUS. SEEK MEDICAL ATTENTION.  
INHALATION: REMOVE TO FRESH AIR AND SEEK MEDICAL ATTENTION AS REQUIRED.

## SECTION IX PREPARATION INFORMATION

MSDS PREPARED BY: JON WALLS  
PREPARATION DATE: March, 30, 2011

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