

# 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: **CONE 6 LEADLESS GLAZE: COPPERNICAN SKY**  
MATERIAL USE: WATER-BASED STONEWARE GLAZE

## SECTION II HAZARDOUS INGREDIENTS

INGREDIENT	%	C.A.S.#	LD50	LC50
<b>FRIT*</b> CONTAINING FUSED COMPOUNDS OF:	<b>30 - 60</b>	<b>65997-18-4</b>	<b>N.A.</b>	<b>N.A.</b>
ALUMINUM	1 - 5	1344-28-1	N.A.	N.A.
CALCIUM	3 - 7	1305-78-8	N.A.	N.A.
SILICON	10 - 30	67762-90-7	N.A.	N.A.
SODIUM	1 - 5	12401-86-4	N.A.	N.A.
BORON	3 - 7	1303-86-2	N.A.	N.A.
<b>SILICA, QUARTZ</b>	<b>3.0 - 7.0</b>	<b>14808-96-6</b>	<b>N.A.</b>	<b>N.A.</b>
<b>MAZERENE BLUE STAIN*</b> CONTAINING OXIDES OF:	<b>0.1 - 1.0</b>	<b>68187-40-6</b>	<b>N.A.</b>	<b>N.A.</b>
SILICON	0.1 - 1.0	14808-60-7	N.A.	N.A.
COBALT	0.1 - 1.0	1396-06-1	N.A.	N.A.
<b>CUPRIC OXIDE</b>	<b>0.5 - 1.5</b>	<b>1317-38-0</b>	<b>N.A.</b>	<b>N.A.</b>

\*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, OFF-WHITE FLUID WITH MILD ODOUR.  
ODOUR THRESHOLD: NOT AVAILABLE  
SPECIFIC GRAVITY: APPROXIMATELY 1.6  
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: NOT AVAILABLE  
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  
POWERFUL ACIDS, BASES AND OXIDIZING AGENTS.  
COPPER OXIDE IS INCOMPATIBLE WITH ACIDS, BASES,  
SOME METALS AND STRONG REDUCTANTS.

CONDITIONS OF REACTIVITY: NONE KNOWN  
HAZARDOUS DECOMPOSITION PRODUCTS: TOXIC FUMES MAY BE RELEASED DURING FIRING  
COPPER FUMES ARE RELEASED ABOVE 1235°C.

## SECTION VI TOXICOLOGICAL PROPERTIES

ROUTE OF ENTRY: SKIN CONTACT:	POSSIBLE IRRITANT.																																													
SKIN ABSORPTION:	UNLIKELY																																													
EYE CONTACT:	POSSIBLE IRRITANT.																																													
INHALATION:	IRRITATING TO THE RESPIRATORY TRACT. SEE SENSITIZATION OF PRODUCT.																																													
INGESTION:	THIS PRODUCT IS LOW IN ACUTE TOXICITY.																																													
EFFECTS OF ACUTE EXPOSURE:	CONTACT WITH EYES, SKIN AND RESPIRATORY TRACT MAY CAUSE PHYSICAL IRRITATION AND INFLAMMATION. COBALT COMPOUNDS HAVE BEEN SHOWN TO CAUSE DERMATITIS AND SENSITIZATION.																																													
EFFECTS OF CHRONIC EXPOSURE:	OVEREXPOSURE TO 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 CUPRIC OXIDE CAUSES NAUSEA, CHILLS AND DIARRHEA; MAY CAUSE SKIN, EYE AND RESPIRATORY IRRITATION AS WELL AS AGGRAVATION OF PREEXISTING LUNG DISEASE. OVEREXPOSURE TO RESPIRABLE CRYSTALLINE SILICA DUST MAY CAUSE: 1/ SILICOSIS, A FORM OF PROGRESSIVE PULMONARY FIBROSIS. 2/ SCLERODERMA, AN IMMUNE SYSTEM DISORDER MANIFESTED BY AFIBROSIS 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 (TWAEV):	<table border="0"> <tr> <td><b>GLAZE FRIT:</b></td> <td><b>NOT ESTABLISHED</b></td> <td>AS COMPONENT OXIDES:</td> <td><b>CALCIUM</b></td> <td><b>2.0 mg./m<sup>3</sup></b></td> </tr> <tr> <td></td> <td></td> <td></td> <td><b>ALUMINUM</b></td> <td><b>10.0 mg./m<sup>3</sup></b></td> </tr> <tr> <td></td> <td></td> <td></td> <td><b>BORON</b></td> <td><b>10.0 mg./m<sup>3</sup></b></td> </tr> <tr> <td></td> <td></td> <td></td> <td><b>FUSED SILICON</b></td> <td><b>0.1 mg./m<sup>3</sup></b></td> </tr> <tr> <td></td> <td></td> <td></td> <td><b>SODIUM</b></td> <td><b>N/A</b></td> </tr> <tr> <td></td> <td><b>SILICA:</b></td> <td><b>0.1 mg./m<sup>3</sup></b></td> <td></td> <td></td> </tr> <tr> <td></td> <td><b>MAZERENE BLUE STAIN:</b></td> <td><b>NOT ESTABLISHED</b></td> <td>AS COMPONENT OXIDES:</td> <td><b>SILICON</b></td> </tr> <tr> <td></td> <td></td> <td></td> <td><b>COBALT (AS METAL)</b></td> <td><b>0.1 mg./m<sup>3</sup></b></td> </tr> <tr> <td></td> <td><b>CUPRIC OXIDE (AS METAL):</b></td> <td><b>1.0 mg./m<sup>3</sup></b></td> <td></td> <td><b>0.02 mg./m<sup>3</sup></b></td> </tr> </table>	<b>GLAZE FRIT:</b>	<b>NOT ESTABLISHED</b>	AS COMPONENT OXIDES:	<b>CALCIUM</b>	<b>2.0 mg./m<sup>3</sup></b>				<b>ALUMINUM</b>	<b>10.0 mg./m<sup>3</sup></b>				<b>BORON</b>	<b>10.0 mg./m<sup>3</sup></b>				<b>FUSED SILICON</b>	<b>0.1 mg./m<sup>3</sup></b>				<b>SODIUM</b>	<b>N/A</b>		<b>SILICA:</b>	<b>0.1 mg./m<sup>3</sup></b>				<b>MAZERENE BLUE STAIN:</b>	<b>NOT ESTABLISHED</b>	AS COMPONENT OXIDES:	<b>SILICON</b>				<b>COBALT (AS METAL)</b>	<b>0.1 mg./m<sup>3</sup></b>		<b>CUPRIC OXIDE (AS METAL):</b>	<b>1.0 mg./m<sup>3</sup></b>		<b>0.02 mg./m<sup>3</sup></b>
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IRRITANCY OF PRODUCT:	REFER TO ROUTE OF ENTRY																																													
SENSITIZATION OF PRODUCT:	BY SKIN CONTACT, MAY PRODUCE ALLERGIC CONTACT DERMATITIS. MAY CAUSE AN ALLERGIC REACTION IN RESPIRATORY ORGANS OF SENSITIVE PERSONS LEADING TO OBSTRUCTION OF AIRWAYS.																																													
CARCINOGENICITY OF PRODUCT:	REFER TO CHRONIC EFFECTS. COBALT IS CLASSIFIED (IARC) AS AN ANIMAL CARCINOGEN AND A POSSIBLE HUMAN CARCINOGEN.																																													
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 (<0.07%). 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>
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. SEEK MEDICAL ATTENTION IF IRRITATION PERSISTS.  
SKIN EXPOSURE: WASH THOROUGHLY AND APPLY MOISTURIZING HAND CREAM TO DRIED, REDDENED SKIN.  
INGESTION: GIVE WATER. DON'T INDUCE VOMITING. SEEK MEDICAL ATTENTION.  
INHALATION: REMOVE TO FRESH AIR. FOR ACUTE ATTACKS, SEEK MEDICAL ATTENTION.

## SECTION IX PREPARATION INFORMATION

MSDS PREPARED BY: JON WALLS  
PREPARATION DATE: JANUARY 29, 2010

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