## MATERIAL SAFETY DATA SHEET

PRODUCT IDENTIFIER : SPECTRUM LEAD FREE RAISED AC					CENT COLOR 2 PRO			DDUCT IDENTIFICATION NUMBER		
PRODUCT USE : CERAM	IC UNDERGLAZE									
MANUFACTURER'S NAME SPECTRUM GLAZES INC.				SUPPLIER'S NAME SPECTRUM GLAZES INC.						
STREET ADDRESS 94 F	STREET ADDRES			DRESS	5 94 FENMAR DRIVE					
CITY TORONTO PROVINCE ONT			'ARIO CITY TORONTO			RONTO	PROVINCE ONTARIO			
POSTAL CODE M9L1M5 EMERGENCY TEL.(416			47-8310 POSTAL CODE M9L1M5 EMERGENC				RGENCY	TEL.(416)747-8310		
SECTION 2 - HAZARDO	US INGREDIENT	's								
HAZARDOUS INGREDIENTS		૪	CAS NUMBER		LD50 OF INGREDIENTS (SPECIFY SPECIES AND ROUTE)				LC50 OF INGREDIENT (SPECIFY SPECIES)	
SiO2		30-40	14808-6	0-7	ILV 15mg/m3 TLV/TWA					
CaO		1-2	1305-78-8							
Na20		8-12	1313-59-3							
A1203		8-10	1344-28-1							
B203		1-2	1303-86	-2						
SECTION 3 - PHYSICA	L DATA									
PHYSICAL STATE LIQUID	ODOUR AND APPEARANCE ODOURLESS LIQUID								ODOUR THRESHOLD(PPM) N.A.	
VAPOUR PRESSURE (mm Hg) N.A.	VAPOUR DENS: (AIR=1)				BOILI	BOILING POINT(C) N.A.		FREEZING POINT(C)		
рн 6.5-7	SPECIFIC GRA	COEFF. WATER/OIL DIST. N.A.								
SECTION 4 - FIRE A	AND EXPLOSION	DATA	•							
FLAMMABILITY YES :	NO X FLAME	S UNDER	WHICH CON	DITIC	NS : I	THIS P	RODUCT I	OES N	OT SUPPORT COMBUSTION	
MEANS OF EXTINCTION	NO SPECIAL M	EANS RE	QUIRED							
FLASHPOINT AND METHOD NONE			UPPER FLAMMABLE LIMIT (% BY VOLUME) N.A.					LOWER FLAMMABLE LIMIT (% BY VOLUME) N.A.		
AUTOIGNITION TEMP.(C) N.A.			HAZARDOUS COMBUSTION PRODUCTS NONE					ΙE		
EXPLOSION DATA N.A.	SENSITIVI	TY IMPA	CT N.A.	ACT	YTIVI	TO ST	ATIC DIS	SCHARG	E N.A.	
		SEC	CTION 5 - I	REACT	IVITY	DATA				
CHEMICAL STABILITY YES X NO IF No	O, UNDER WHIC	'H CONDI	TIONS							
INCOMPATIBILITY WIT	H OTHER SUBST O WHICH ONESR		TY							
REACTIVITY AND UNDE	R WHAT CONDIT	'IONS: N	O REACTIVI	TY						

PRODUCT IDENTIFIER SPECTRUM LEAD FREE UNDERGLAZE RAC2 GREY SECTION 6 - TOXICOLOGICAL PROPERTIES ROUTE OF ENTRY SKIN CONTACT SKIN ABSORPTION X EYE CONTACT X INHALATION INGESTION EFFECTS OF ACUTE EXPOSURE TO PRODUCT: SKIN IRRITATION DUE TO ABRASIVENESS. EYE EXPOSURE COULD CAUSE IRRITATION BUT NO TOXIC EFFECTS. EFFECTS OF CHRONIC EXPOSURE TO PRODUCT: METAL FUMES IN THE VAPOURS FROM FIRING CERAMIC GLAZES MAY INFLAMATION AND DAMAGE TO KIDNEY AND NERVOUS CAUSE LUNG SYSTEM. EXPOSURE LIMITS IRRITANCY OF PRODUCT SENSITIZATION TO CARCINOGENICITY PRODUCT TERATOGENCITY REPRODUCTIVE TOXICITY MUTAGENICITY SYNERGISTIC PRODUCTS SECTION 7 - PREVENTIVE MEASURES PERSONAL PROTECTIVE EQUIPMENT: GLOVES (SPECIFY) RESPIRATOR (SPECIFY) EYE (SPECIFY) WORK GLOVES APPROVED DUST MASK SAFETY GLASSES FOOTWEAR (SPECIFY) CLOTHING (SPECIFY) OTHER (SPECIFY) ENGINEERING CONTROLS (SPECIFY, EG. VENTILATION, ENCLOSED PROCESS) VENTILATION SHOULD BE USED WHEN SPRAYING GLAZES. LEAK AND SPILL PROCEDURE: SCOOP INTO SUITABLE RECEPTACLE. DO NOT WASH DOWN DRAIN. WASTE DISPOSAL: SEND TO APPROVED SITE IN ACCORDANCE WITH REGULATIONS. HANDLING PROCEDURES AND EQUIPMENT: NO SPECIAL EQUIPEMENT NEEDED. FOLLOW STANDARD PLANT HYGIENE PROCEDURE. STORAGE REQUIREMENTS: STORE IN DRY AREAS. SPECIAL SHIPPING INFORMATION: PROTECT AGAINST PHYSICAL DAMAGE. DOT LABEL NON-REGULATED SECTION 8 - FIRST AID MEASURES SPECIFIC MEASURES: GLAZE CONTAINS THE OXIDES LISTED IN THE CHEMICAL FORMULA IN FORM OF CERAMIC FRIT. SOME OF THESE OXIDES ARE ON THE INGREDIENT DISCLOSURE LIST, ONCE THESE OXIDES ARE FUSED AND CONVERTED INTO FRIT THEY ARE NO LONGER AVAILABLE IN TOXIC FORM EVEN THOUGH TESTING WOULD DETECT THE PRESENCE OF THESE OXIDES. (FRIT IS ESSENTIALLY AN INSOLUBLE SUBSTANCE). THE OXIDES ARE PRESENT IN THE FORM OF A SINTERED CERAMIC STAIN OF LOW SOLUBILITY. THESE INGREDIENTS ARE PRESENT IN A STABLE AOUEOUS SUSPENSION. SECTION 9 - PREPARATION DATE OF MSDS PHONE NUMBER: PREPARED BY DATE (GROUP, DEPARTMENT, ETC.) (416)747 - 831030 JULY 2009 TECHNICAL DEPT.