## MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUC	T IDENT		MATERIAL SAF	ETY DATA S	HEET					
SECTION 1 - PRODUCT IDENTIFICATION AND USE  PROD.IDENTIFIER:SPECTRUM LEADFREE RAKU GLAZE 891 NORTHERN LIGHTS PRODUCT IDENT. NUMBER 891										
PRODUCT USE : CERAMIC		DINEE NAM	J GLAZE 091 .	NOTTIIBIUV II.	101110	TRODUCT	IDENI. NORDEN OUI			
MANUFACTURER'S NAME		M GLAZES	INC	SUPPLIER!	S NAME	SPECTRIIM (	GLAZES INC			
STREET ADDRESS: 273 B				SUPPLIER'S NAME SPECTRUM GLAZES INC.  STREET ADDRESS: 273 BOWES RD, UNIT A1						
	2.10			VINCE: ONTARIO						
CITY: CONCORD PROVINCE: ONTARI  POSTAL CODE: L4K1H8 EMERGENCY TEL(905)6				CITY: CONCORD PRO' POSTAL CODE: L4K1H8 EMERGEI						
POSTAL CODE: L4KIH8 E	MERGENC	1 TEL (905)	095-8355	POSTAL CO	DE: L4KI	.H8 EMERGEI	NC1 TEL (905) 695-8355			
SECTION 2 - HAZARDOUS	INGRED	IENTS								
HAZARDOUS INGREDIENTS		olo	CAS NUMBER		OF INGR	LC50 OF INGREDIE				
Si02		20-30	14808-60-7	ILV 15mg/m3 TLV/TWA						
K20		2-4	12136-45-7							
Na2O		4-7	1313-59-3							
CaO		1-2	1305-78-8							
B203		2-5	1303-86-2							
AL203		2-4	1344-28-1							
ZnO		.5-1.5	1314-13-2							
CuO		1-3	1317-38-0							
MnO2		.5-1	1313-13-9							
SECTION 3 - PHYSICAL	DATA									
PHYSICAL STATE LIQUID	ODOUR AND APPEARANCE ODOURLESS LIQUID						ODOUR THRESHOLD(PPM)			
VAPOUR PRESSURE (mm Hg) N.A.	VAPOUR DENSITY (AIR=1)		EVAPORAT:	EVAPORATION RATE BOILING N.A. POINT (		G C) N.A.	FREEZING POINT(C)			
рн 6.5-7	SPECIFIC COEFF. WA			ATER/OIL DIST.						
SECTION 4 - FIRE AND	EXPLOS	SION DATA	1							
FLAMMABILITY YES NO	X F	LAMES UNDI	ER WHICH CON	DITIONS : '	THIS PRO	DUCT DOES	NOT SUPPORT COMBUSTI			
MEANS OF EXTINCTION N	O SPECI	AL MEANS I	REQUIRED							
FLASHPOINT AND METHOD NONE				MMABLE LIM UME) N.A.	R FLAMMABLE LIMIT Y VOLUME) N.A.					
AUTOIGNITION TEMP.(C) N.A.			HAZARDOUS							
EXPLOSION DATA N.A.	PACT N.A.	CT N.A. ACTIVITY TO STATIC DISCHARGE N.A.								
		s	ECTION 5 - F	EACTIVITY	DATA					
CHEMICAL STABILITY	YES	X NO_	IF NO, UNDE	R WHICH CO	NDITIONS					
INCOMPATIBILITY WITH	OTHER S	UBSTANCES	YES N	O X IF S	O WHICH	ONES REACT	IVITY			
REACTIVITY AND UNDER	WHAT CO	NDITIONS:	NO REACTIVI	TY						
HAZARDOUS DECOMPOSITION	ON PROD	UCT: MATE	RIAL IS STAB	LE, NO POL	YMERIZAT	ION BUT TO	XIC FUMES MAY BE			

HAZARDOUS DECOMPOSITION PRODUCT: MATERIAL IS STABLE, NO POLYMERIZATION BUT TOXIC FUMES MAY BE RELEASED WHEN MATERIAL IS MELTED.

PRODUCT IDENTIFIER SPECTRUM LEAD FREE RAKU GLAZE 891 NORTHERN LIGHTS												
SECTION 6 - TOXICOLOGICAL PROPERTIES												
ROUTE OF ENTRY SKIN CONTACT SKIN ABSORPTION X EYE CONTACT X INHALATION INGESTION X												
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 CAUSE LUNG INFLAMATION AND DAMAGE TO KIDNEY AND NERVOUS SYSTEM.												
EXPOSURE LIMITS	IRRITAN	CY OF PRODUCT	SENSITIZATION TO PRODUCT		CARCINOGENICITY							
TERATOGENCITY	REPRODU(	CTIVE TOXICITY	MUTAGENICITY		SYNERGISTIC PRODUCTS							
SECTION 7 - PREVENTIVE MEASURES												
PERSONAL PROTECTIVE EQUIPMENT:												
GLOVES (SPECIFY) WORK GLOVES		RESPIRATOR (SPEC APPROVED DUST MA	EYE (SPECIFY) SAFETY GLASSES									
FOOTWEAR (SPECIFY)		CLOTHING (SPECIF	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 AQUEOUS SUSPENSION.												
SECTION 9 - PREPARATION DATE OF MSDS												
PREPARED BY (GROUP, DEPARTMENT, ETC.) TECHNICAL DEPT.		PHONE NUMBER: (905)695-8355		DATE 15 FEBRUARY 2016								