MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT IDENTIFICATION AND USE PRODUCT IDENTIFIER: SPECTRUM LEAD FREE 943 GLACIER PRODUCT IDENTIFICATION NUMBER 943 PRODUCT USE : CERAMIC GLAZE SUPPLIER'S NAME SPECTRUM GLAZES INC. MANUFACTURER'S NAME SPECTRUM GLAZES INC. STREET ADDRESS: 273 BOWES RD, UNIT A1 STREET ADDRESS: 273 BOWES RD, UNIT A1 CITY: CONCORD PROVINCE: ONTARIO CITY: CONCORD PROVINCE: ONTARIO POSTAL CODE: L4K1H8 EMERGENCY TEL(905)695-8355 POSTAL CODE: L4K1H8 EMERGENCY TEL(905)695-8355 SECTION 2 - HAZARDOUS INGREDIENTS LD50 OF INGREDIENTS LC50 OF INGREDIENT HAZARDOUS INGREDIENTS 응 CAS NUMBER (SPECIFY SPECIES AND ROUTE) (SPECIFY SPECIES) SiO2 25-35 14808-60-7 ILV 15mg/m3 OSHA/TWA K20 0.5 - 212136-45-7 0.5 - 21313-59-3 Na20 9-12 1305-78-8 CaO 0.1-0.3 1304-28-5 BaO A1203 2 - 41344-28-1 B203 6-8 1303-86-2 12057-24-8 Li20 0.5 - 21314-18-7 0.5 - 2SrO2 CoO 0.1 - 0.368186-86-7 CERAMIC STAIN - BLUE 1-2 1345-16-0 0.5 - 1SPECKLE White SECTION 3 - PHYSICAL DATA PHYSICAL STATE LIQUID ODOUR AND APPEARANCE ODOUR THRESHOLD (PPM) ODOURLESS LIQUID N.A. VAPOUR PRESSURE VAPOUR DENSITY FREEZING POINT(C) EVAPORATION RATE BOILING POINT(C) (mm Hg) N.A. (ATR=1)N.A. N.A. N.A. рн 6.5-7 SPECIFIC GRAVITY COEFF. WATER/OIL DIST. 1.6-2.0 N.A. SECTION 4 - FIRE AND EXPLOSION DATA FLAMMABILITY YES NO X FLAMES UNDER WHICH CONDITIONS : THIS PRODUCT DOES NOT SUPPORT COMBUSTION MEANS OF EXTINCTION NO SPECIAL MEANS REQUIRED FLASHPOINT AND METHOD UPPER FLAMMABLE LIMIT LOWER FLAMMABLE LIMIT NONE (% BY VOLUME) N.A. (% BY VOLUME) N.A. AUTOIGNITION TEMP. (C) N.A. HAZARDOUS COMBUSTION PRODUCTS NONE EXPLOSION DATA N.A. SENSITIVITY IMPACT N.A. ACTIVITY TO STATIC DISCHARGE N.A. SECTION 5 - REACTIVITY DATA CHEMICAL STABILITY YES X NO IF NO, UNDER WHICH CONDITIONS INCOMPATIBILITY WITH OTHER SUBSTANCES NO X IF SO WHICH ONESREACTIVITY REACTIVITY AND UNDER WHAT CONDITIONS: NO REACTIVITY

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

MATERIAL IS MELTED.

PRODUCT IDENTIFIER SPECTRUM LEAD FREE 943 GLACIER					
SECTION 6 - TOXICOLOGICAL PROPERTIES					
ROUTE OF ENTRY SKIN CONTACT SKI		IN 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	IRRITANC	Y OF PRODUCT	SENSITIZATION TO PRODUCT		CARCINOGENICITY
TERATOGENCITY	REPRODUCTIVE TOXICITY		MUTAGENICITY		SYNERGISTIC PRODUCTS
SECTION 7 - PREVENTIVE MEASURES					
PERSONAL PROTECTIVE EQUIPMENT:					
GLOVES (SPECIFY) WORK GLOVES		RESPIRATOR (SPECIFY) APPROVED DUST MASK		EYE (SPECIFY) 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 AQUEOUS SUSPENSION.					
SECTION 9 - PREPARATION DATE OF MSDS					
PREPARED BY (GROUP, DEPARTME TECHNICAL DEPT.	NT,ETC.)	PHONE NUMBER: (905)695-8355		DATE 15 OCTO	BER 2015