

MATERIAL SAFETY DATA SHEET

3931.

SECTION 1 - PRODUCT IDENTIFICATION AND USE

PRODUCT IDENTIFIER : SPECTRUM LEAD FREE RAISED ACCENT COLOR 3 BLACK	PRODUCT IDENTIFICATION NUMBER RAC3
PRODUCT USE : CERAMIC UNDERGLAZE	
MANUFACTURER'S NAME SPECTRUM GLAZES INC.	SUPPLIER'S NAME SPECTRUM GLAZES INC.
STREET ADDRESS 40 HANLAN RD UNIT 33	STREET ADDRESS 40 HANLAN RD UNIT 33
CITY WOODBRIDGE PROVINCE ONTARIO	CITY WOODBRIDGE PROVINCE ONTARIO
POSTAL CODE L4L 3P6 EMERGENCY TEL.NO. (905) 851-8310	POSTAL CODE L4L 3P6 EMERGENCY TEL.NO. (905) 851-8310

SECTION 2 - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS	%	CAS NUMBER	LD50 OF INGREDIENTS (SPECIFY SPECIES AND ROUTE)	LC50 OF INGREDIENT (SPECIFY SPECIES)
SiO2	30-40			
CaO	1-2	1305-78-8		
Na2O	8-12			
Al2O3	8-10	1344-28-1		
B2O3	1-2			

SECTION 3 - PHYSICAL DATA

PHYSICAL STATE LIQUID	ODOUR AND APPEARANCE ODOURLESS LIQUID			ODOUR THRESHOLD (PPM) N.A.
VAPOUR PRESSURE (mm Hg) N.A.	VAPOUR DENSITY (AIR=1)	EVAPORATION RATE N.A.	BOILING POINT (C) N.A.	FREEZING POINT (C) N.A.
pH 6.5-7	SPECIFIC GRAVITY 1.8-2.2	COEFF. WATER/OIL DIST. 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 NONE	UPPER FLAMMABLE LIMIT (% BY VOLUME) N.A.	LOWER FLAMMABLE LIMIT (% 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 YES \_\_\_ NO X IF SO WHICH ONES REACTIVITY

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.

RECEIVED  
APR 16 2009  
Facilities Management  
CHALZEE AND SARTON

PRODUCT IDENTIFIER SPECTRUM LEAD FREE UNDERGLAZE RAC3 BLACK

**SECTION 6 - TOXICOLOGICAL PROPERTIES**

ROUTE OF ENTRY  
INGESTION X      SKIN CONTACT      SKIN ABSORPTION X      EYE CONTACT X      INHALATION

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	IRRITANCY OF PRODUCT	SENSITIZATION TO PRODUCT	CARCINOGENICITY
TERATOGENICITY	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, DEPARTMENT, ETC.) TECHNICAL DEPT.	PHONE NUMBER: (905) 851-8310	DATE May 7, 2007
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