

MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT IDENTIFICATION AND USE

PRODUCT IDENTIFIER: SPECTRUM LEAD FREE CRYSTALS CR03 YELLOW

PRODUCT IDENTIFICATION NUMBER CR03

PRODUCT USE : CERAMIC GLAZE

MANUFACTURER'S NAME SPECTRUM GLAZES INC.

SUPPLIER'S NAME SPECTRUM GLAZES INC.

STREET ADDRESS: 273 BOWES RD, UNIT A1

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CITY: CONCORD PROVINCE: ONTARIO

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POSTAL CODE: L4K1H8 EMERGENCY TEL(905)695-8355

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SECTION 2 - HAZARDOUS INGREDIENTS

EXPOSURE LIMIT - AIR mg/m3-8 hr. TWA

HAZARDOUS INGREDIENTS	%	CAS NUMBER	OSHA PEL	ACGIH TLV
ZrO2	20-25	1314-23-4	5.0 Zr	5.0 Zr
*SILICA (SiO2)	25-30	14808-60-7	10 MG/M3 %SiO2+2	0.05
Al2O3	2-3	1344-28-1	15.0 TOTAL DUST, 5.0 RESP.DUST	10.0
B2O3 FRIT	8-10	1308-36-2	10.0 TOTAL DUST, 5.0 RESP.DUST	10.0

* SILICA, CRYSTALLINE QUARTZ, (SiO2) IS CONSIDERED TO BE CARCINOGENIC BY IARC CLASS IIA.

SEE SECTION 8

SECTION 3 - PHYSICAL DATA

PHYSICAL STATE GRANULAR	ODOUR AND APPEARANCE ODOURLESS SOLID			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	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.

PRODUCT IDENTIFIER SPECTRUM LEAD FREE CRYSTALS CR03 YELLOW

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 CRYSTALS 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

THIS MIXTURE MAY CONTAIN-IN FRIT (TOXIC SUBSTANCES CONTROL ACT INVENTORY, CHEMICAL ABSTRACTS SERVICE NUMBER 65997-18-4) AND/OR OTHER TYPICAL CERAMIC RAW MATERIALS, INCLUDING PIGMENT (S) THAT BELONG TO THE MIXED METAL OXIDES PIGMENTS CLASS, (WHICH ARE THE RESULT OF HIGH TEMPERATURE CALCINATIONS) AND ALTHOUGH THEY CONSIST OF METAL ATOMS AND OXYGEN ATOMS ARRANGED IN UNIQUE CRYSTAL STRUCTURES, THEIR TOXICOLOGICAL PROPERTIES ARE NOT CONSIDERED TO BE THOSE OF EITHER THE METAL OR THE METAL OXIDES-RATHER THEY ARE MAN-MADE MINERALS WHICH CLOSELY DUPLICATE THE PROPERTIES OF THEIR NATURAL COUNTERPARTS, WHICH THEY CLOSELY RESEMBLE, BUT THEY MAY CONTAIN A SMALL AMOUNT OF THE RAW MATERIAL METAL OXIDES PUTTING THEM IN TH OSHA HAZARDOUS CATEGORY- THE FOLLOWING POTENTIALLY HAZARDOUS SUBSTANCES REFERENCED BY FED/OHSHA IN CFR 1910.1200:

SECTION 9 - PREPARATION DATE OF MSDS

PREPARED BY (GROUP, DEPARTMENT, ETC.) TECHNICAL DEPT.	PHONE NUMBER: (416) 747-8310	DATE 1 AUGUST 2012
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