SECTION 1 - PRODU	UCT IDENTIFIC	ATION AN	ND USE					···			
PRODUCT IDENTIFIER: SPECTRUM LEAD FREE RAISED ACCENT COLOR 1 PRODUCT IDENTIFICATION NUMBER RAC1											
PRODUCT USE : CERAM	IIC UNDERGLAZ	Ε					***************************************				
MANUFACTURER'S NAME	SPECTRUM G	LAZES IN	c.	SUP	PLIER'	s name	SPEC'	TRUM G	LAZES 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 TEL.NO. (905)851-831					TAL CO			EME	RGENCY		
SECTION 2 - HAZARDO	US INGREDIEN	rs									
HAZARDOUS INGREDIENTS			CAS NUMBER			OF INGREDIENTS IFY SPECIES AND		LC50 OF INGREDIENT (SPECIFY SPECIES)			
SiO2		30-40						_			
CaO		1-2	1305-7	8-8							
Na2O		8-12									
A1203		8-10	1344-2	8-1							
B203		1-2									
		- , , , , , , , , , , , , , , , , , , ,									
SECTION 3 - PHYSICA	L DATA		I		· · · · · · · · · · · · · · · · · · ·						
PHYSICAL STATE LIQUID	ODOUR AND A		E	• -					ODOUR THRESHOLD (PPM N.A.		
VAPOUR PRESSURE (mm Hg) N.A.	VAPOUR DENS	ITY	EVAPORAT	ION	RATE	BOILI N.A.	NG POI	NT (C)	FREEZING POINT(C)		
рН 6.5-7	SPECIFIC GR	AVITY	COEFF. W	ATER	/OIL D	IST.					
SECTION 4 - FIRE A	ND EXPLOSION	DATA									
FLAMMABILITY YESCOMBUSTION	NO X FLAM	ES UNDER	WHICH CO	NDIT	IONS :	THIS	PRODUCT	DOES	NOT SUPPORT		
MEANS OF EXTINCTION	NO SPECIAL	MEANS RE	QUIRED								
FLASHPOINT AND METH	IOD								CR FLAMMABLE LIMIT SY VOLUME) N.A.		
AUTOIGNITION TEMP. (C) N.A.		HAZARDOUS	S COMBUSTION PRODUCTS NONE							
EXPLOSION DATA N.A.	SENSITIV	ITY IMPA	CT N.A.	ACTIVITY TO STATIC DISCHARGE N.A.							
		SECT	FION 5 - 1	EACI	YTIVI	DATA					
CHEMICAL STABILITY YES X NO IF N	O, UNDER WHI	CH CONDI	TIONS								
INCOMPATIBILITY WIT	TH OTHER SUBS		TY						944		
REACTIVITY AND UNDE	R WHAT CONDI	rions: N	O REACTIV	ITY					M.A		
HAZARDOUS DECOMPOSI RELEASED WHEN	TION PRODUCT	: MATERI	AL IS STA				ZATION	BUT T	OXIC FUMES MAY BE		

PRODUCT IDENTIFIER SPECTRUM LEAD FREE UNDERGLAZE RAC1 WHITE 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 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 AQUEOUS SUSPENSION. SECTION 9 - PREPARATION DATE OF MSDS PREPARED BY PHONE NUMBER: DATE (GROUP, DEPARTMENT, ETC.) (905) 851-8310 May 7, 2007 TECHNICAL DEPT.

SECTION 1 - PROD	UCT IDENTIFIC	ATION AN	D USE				<u></u>			
PRODUCT IDENTIFIER: SPECTRUM LEAD FREE RAISED ACCENT COLOR 3 PRODUCT IDENTIFICATION NUMBER RAC3										
PRODUCT USE : CERAN	IC UNDERGLAZ	E								
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 POSTAL CODE L4L 3P6 EMERGENCY TEL.NO. (905) 851-8310										
SECTION 2 - HAZARDO	OUS INGREDIEN	TS								
HAZARDOUS INGR	8	CAS NUMBER		LD50 OF INGREDIES (SPECIFY SPECIES ROUTE)				LC50 OF INGREDIENT (SPECIFY SPECIES)		
SiO2		30-40								
CaO		1-2	1305-7	8-8						
Na2O		8-12								
A1203		8-10	1344-2	8-1			•			
B203		1-2								
										
SECTION 3 - PHYSICA	L DATA	***************************************	********					******		
PHYSICAL STATE LIQUID	ODOUR AND A		C						ODOUR THRESHOLD (PPM) N.A.	
VAPOUR PRESSURE (mm Hg) N.A.	VAPOUR DENS (AIR=1)	ITY	EVAPORAT	'ION F	ATE	BOILI N.A.	ING POIN	NT (C)	FREEZING POINT(C) N.A.	
рн 6.5-7	SPECIFIC GR 1.8-2.2	AVITY	COEFF. W	ATER/	OIL D	IST.				
SECTION 4 - FIRE	ND EXPLOSION	DATA								
FLAMMABILITY YESCOMBUSTION	NO X FLAM	ES UNDER	WHICH CO	NDITI	ONS :	THIS	PRODUCT	DOES	NOT SUPPORT	
MEANS OF EXTINCTION	NO SPECIAL	MEANS REQ	QUIRED	•						
FLASHPOINT AND METH	HOD		UPPER FLA (% BY VOI		IT	LOWER FLAMMABLE LIMIT (% BY VOLUME) N.A.				
AUTOIGNITION TEMP.	(C) N.A.	!	HAZARDOUS	DOUS COMBUSTION PRODUCTS NONE						
EXPLOSION DATA N.A.	SENSITIV	ITY IMPA	CT N.A.	ACT	VIVITY	TO ST	TATIC DI	SCHAR	GE N.A.	
		SECT	ION 5 ~ 1	REACT	IVITY	DATA				
CHEMICAL STABILITY YES X NO IF I		CH CONDI	rions							
INCOMPATIBILITY WIT			ГҮ							
REACTIVITY AND UND	ER WHAT CONDI	TIONS: NO	O REACTIV	'ITY						
HAZARDOUS DECOMPOSE RELEASED WHEN	ITION PRODUCT	: MATERIA	AL IS STA				ZATION ELTED.	BUT TO	OXIC FUMES MAY BE	

PRODUCT IDENTIFIER SPECTRUM LEAD FREE UNDERGLAZE RAC3 BLACK 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 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 SAFETY GLASSES APPROVED DUST MASK 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 PHONE NUMBER: DATE (GROUP, DEPARTMENT, ETC.) (905) 851-8310 May 7, 2007 TECHNICAL DEPT.

SECTION 1 - PROD	OUCT IDENTIFIC	CATION A	AND USE							
PRODUCT IDENTIFIER: SPECTRUM LEAD FREE RAISED ACCENT COLOR 4 BROWN PRODUCT IDENTIFICATION NUMBER RAC4										
PRODUCT USE : CERAI	MIC UNDERGLAZ	E								
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 3PG TEL.NO. (905) 851-83				1	TAL COL			RGENCY		
SECTION 2 - HAZARDO	OUS INGREDIEN	TS								
HAZARDOUS INGR	ક	CAS NUMBER		LD50 OF INGREDIENTS (SPECIFY SPECIES AND ROUTE)			LC50 OF INGREDIENT (SPECIFY SPECIES)			
SiO2		30-40								
CaO	-	1-2	1305-78	8-8						
Na20	a20									
A1203	1203			8-1	***************************************		·			
B203	3									
SECTION 3 - PHYSICA	AL DATA			, <u></u>						
PHYSICAL STATE LIQUID	I ODOUR THRESHOLD (PP)									
VAPOUR PRESSURE (mm Hg) N.A.	VAPOUR DENS (AIR=1)	VAPOUR DENSITY EVAPORATION RATE BOILING POINT(C) FREEZING POINT(C								
рн 6.5-7	SPECIFIC GR 1.8-2.2	AVITY	COEFF. W.	ATER/	OIL DI	ST.				
SECTION 4 - FIRE	ND EXPLOSION	DATA								
FLAMMABILITY YESCOMBUSTION	NO X FLAM	ES UNDE	R WHICH CO	NDITI	ONS :	THIS	PRODUCT DOES	NOT SUPPORT		
MEANS OF EXTINCTION	NO SPECIAL	MEANS RI	EQUIRED							
FLASHPOINT AND METH NONE	IOD		UPPER FLA (% BY VOL			T		R FLAMMABLE LIMIT Y VOLUME) N.A.		
AUTOIGNITION TEMP. (C) N.A.		HAZARDOUS	S COMBUSTION PRODUCTS NONE						
EXPLOSION DATA N.A.	SENSITIV	ITY IMPA	ACT N.A.	ACT	IVITY	TO ST	ATIC DISCHAR	GE N.A.		
		SEC	TION 5 - R	EACT	VITY I	DATA				
CHEMICAL STABILITY YES X NO IF N	O, UNDER WHI	CH COND:	ITIONS							
INCOMPATIBILITY WIT	'H OTHER SUBS'	rances	(TY							
REACTIVITY AND UNDE	R WHAT CONDI	rions: 1	NO REACTIVE	ITY						
HAZARDOUS DECOMPOSI	TTON PRODUCT	· MATED	TAT TO CONT							

PRODUCT IDENTIFIER SPECTRUM LEAD FREE UNDERGLAZE RAC4 BROWN 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 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 AQUEOUS SUSPENSION. SECTION 9 - PREPARATION DATE OF MSDS PREPARED BY PHONE NUMBER: DATE (GROUP, DEPARTMENT, ETC.) (905) 851-8310 May 7, 2007 TECHNICAL DEPT.

SECTION 1 - PROD	UCT IDENTIFIC	ATION A	ND USE								
PRODUCT IDENTIFIER: SPECTRUM LEAD FREE RAISED ACCENT COLOR 8 ORANGE PRODUCT IDENTIFICATION NUMBER RAC8											
PRODUCT USE : CERAN	MIC UNDERGLAZ	Ē									
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 - HAZARDO	OUS INGREDIEN	rs									
HAZARDOUS INGR	EDIENTS	o l o	CAS NUMBER	1	LD50 OF INGR (SPECIFY SPEC				LC50 OF INGREDIENT (SPECIFY SPECIES)		
SiO2		30-40									
CaO		1-2	1305-78	8-8							
Na2O		8-12						***			
A1203	1203		1344-28	8-1							
B203		1-2									
SECTION 3 - PHYSICA	L DATA										
PHYSICAL STATE LIQUID	ODOUR AND A		CE						ODOUR THRESHOLD(PPM) N.A.		
VAPOUR PRESSURE (mm Hg) N.A.	VAPOUR DENS	ITY	EVAPORAT	ION R	ATE	BOILI	NG POI	NT(C)	FREEZING POINT(C)		
pH 6.5-7	SPECIFIC GRA	YTIV	COEFF. W	ATER/	OIL D	IST.					
SECTION 4 - FIRE A	ND EXPLOSION	DATA									
FLAMMABILITY YESCOMBUSTION	NO X FLAM	ES UNDEF	WHICH CO	NDITI	ONS :	THIS	PRODUCT	DOES	NOT SUPPORT		
MEANS OF EXTINCTION	NO SPECIAL I	ÆANS RE	QUIRED								
FLASHPOINT AND METH	IOD								ER FLAMMABLE LIMIT BY VOLUME) N.A.		
AUTOIGNITION TEMP.	C) N.A.		HAZARDOUS	US COMBUSTION PRODUCTS NONE							
EXPLOSION DATA N.A.	SENSITIV	TY IMPA	CT N.A.	ACT	IVITY	TO ST	ATIC DI	SCHAR	GE N.A.		
		SEC	TION 5 - F	EACT:	CVITY	DATA					
CHEMICAL STABILITY YES X NO IF N	O, UNDER WHIC	CH CONDI	TIONS								
INCOMPATIBILITY WIT	TH OTHER SUBST	TANCES REACTIVI	TY								
REACTIVITY AND UNDE	R WHAT CONDI	TIONS: N	O REACTIV	ITY							
HAZARDOUS DECOMPOSI RELEASED WHEN	TION PRODUCT	MATERI	AL IS STA				ZATION ELTED.	BUT TO	DXIC FUMES MAY BE		

PRODUCT IDENTIFIER SPECTRUM LEAD FREE UNDERGLAZE RAC8 ORANGE 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 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 AQUEOUS SUSPENSION. SECTION 9 - PREPARATION DATE OF MSDS PREPARED BY PHONE NUMBER: DATE (GROUP, DEPARTMENT, ETC.) (905) 851-8310 May 7, 2007 TECHNICAL DEPT.

SECTION 1 - PROI	OUCT IDENTIFI		AND HER							
PRODUCT IDENTIFIER ROYAL BLUE		· · · · · · · · · · · · · · · · · · ·		ENT C	OLOR 1	.3	PRODUCT II	DENTIFICATION NUMBER		
PRODUCT USE : CERA	MIC UNDERGLAZ	E					.4.013			
MANUFACTURER'S NAM	E SPECTRUM G	LAZES I	NC.	SUP	PLIER'	S NAME	SPECTRUM (GLAZES INC		
STREET ADDRESS 40 HANLAN RD UNIT 33 STREET ADDRESS 40 HANLAN RD UNIT 33 STREET ADDRESS 40 HANLAN RD UNIT 33										
CITY WOODBRIDGE	PR	OVINCE	ONTARIO	CIT		DBRIDG				
POSTAL CODE L4L 3P TEL.NO. (905) 851-83	6 EMERGENCY			POS	TAL CO	DE L41	3P6 EMI	OVINCE ONTARIO ERGENCY		
SECTION 2 - HAZARDO	OUS INGREDIEN	TS		<u> </u>	· · · · · · · · · · · · · · · · · · ·					
HAZARDOUS INGR	ક	CAS NUMBER			INGREDIENTS SPECIES AND	LC50 OF INGREDIENT (SPECIFY SPECIES)				
SiO2		30-40				*		(GIZGIII BIBGIBS)		
CaO		1-2	1305-78	3-8						
Na2O		8-12								
A1203	203			3-1						
B203		1-2								

SECTION 3 - PHYSICA	L DATA									
PHYSICAL STATE LIQUID	ODOUR AND A	PPEARAN(CE					ODOUR THRESHOLD(PPM)		
VAPOUR PRESSURE (mm Hg) N.A.	VAPOUR DENSITY EVAPORATION RATE BOILING POINT(C) FREEZING POINT(C) N.A. N.A.									
pH 6.5-7	SPECIFIC GRA	VITY	COEFF. WA	ATER/	OIL DI	ST.	<u>, , , , , , , , , , , , , , , , , , , </u>			
SECTION 4 - FIRE A	ND EXPLOSION	DATA								
FLAMMABILITY YESCOMBUSTION	NO X FLAME	S UNDEF	WHICH COM	NDITI	ONS :	THIS I	PRODUCT DOES	NOT SUPPORT		
MEANS OF EXTINCTION	NO SPECIAL N	EANS RE	QUIRED		···					
FLASHPOINT AND METH NONE	OD		UPPER FLAM			T	LOWER	R FLAMMABLE LIMIT VOLUME) N.A.		
AUTOIGNITION TEMP.(C) N.A.		HAZARDOUS	COMBUSTION PRODUCTS NONE						
EXPLOSION DATA N.A.	SENSITIVI	TY IMPA	CT N.A.	ACT	'IVITY	TO STA	TIC DISCHAR	GE N.A.		
		SEC	rion 5 - Ri	EACT	IVITY I	DATA				
CHEMICAL STABILITY YES X NO IF N	O, UNDER WHIC	H CONDI	TIONS							
INCOMPATIBILITY WIT YES_ NO X IF S	H OTHER SUBST O WHICH ONESR	ANCES EACTIVI	TY							
REACTIVITY AND UNDE	R WHAT CONDIT	IONS: N	O REACTIVI	TY						
HAZARDOUS DECOMPOSI RELEASED WHEN	TION PRODUCT:	MATERI	AL IS STAB	LE,	NO POL	YMERIZ	ATION BUT TO	DXIC FUMES MAY BE		

PRODUCT IDENTIFIER SPECTRUM LEAD FREE UNDERGLAZE RAC13 ROYAL BLUE 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 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 AQUEOUS SUSPENSION. SECTION 9 - PREPARATION DATE OF MSDS PREPARED BY PHONE NUMBER: DATE (GROUP, DEPARTMENT, ETC.) (905) 851-8310 May 7, 2007 TECHNICAL DEPT.

			_	AL SAF	ETY	DATA	A SHEE	<u>gt</u>				
SECTION 1 - PRO	DUCT IDENTIFI	CATION	ANI	USE								
PRODUCT IDENTIFIER HUNTER GREEN	R:SPECTRUM LEA	RAI	SED ACCE	ENT (COLOR1	6	PRODU RAC16	CT II	IDENTIFICATION NUMBER			
PRODUCT USE : CERA	MIC UNDERGLAZ	E						•				
MANUFACTURER'S NAME SPECTRUM GLAZES INC. SUPPLIER'S NAME SPECTRUM GLAZES INC.											ES INC.	
STREET ADDRESS 40	HANLAN RD UNI	Т 33			STF	REET AI	ODRESS 4	40 HANL	AN RI	D UN	IT 33	
CITY WOODBRIDGE	PR	OVINCE	Q:	NTARIO	CIT	OW Y	DDBRIDGE	£	PRO	OVIN	CE ONTARIO	
POSTAL CODE L4L 3P TEL.NO. (905)851-83	6 EMERGENCY 10	·			POS TEI	STAL CO	DE L4L 905)851-	3P6 -8310		ERGE		
SECTION 2 - HAZARD	OUS INGREDIEN	TS					· · · · · · · · · · · · · · · · · · ·					
HAZARDOUS INGREDIENTS				CAS NUMBER		LD50 OF II (SPECIFY S		INGREDIENTS SPECIES AND			LC50 OF INGREDIENT (SPECIFY SPECIES)	
SiO2		30-40								_	(OLECTE SPECIES)	
CaO		1-2		1305-78	3-8	<u> </u>				_		
Na2O		8-12								-		
A1203	1203			1344-28						\dashv		
B203		1-2							·	+		
										-		
SECTION 3 - PHYSICA	AL DATA						·····		····			
PHYSICAL STATE LIQUID	ODOUR AND A	PPEARAN IQUID	ICE							ODG N.2	OUR THRESHOLD (PPM)	
VAPOUR PRESSURE (mm Hg) N.A.	VAPOUR DENS: (AIR=1)	ITY		VAPORATI	ON F	RATE	BOILING N.A.	G POINT	(C)	_	EEZING POINT(C)	
рН 6.5-7	SPECIFIC GRA	VITY		COEFF. WA	ATER/	OIL D	IST.					
SECTION 4 - FIRE A	ND EXPLOSION	DATA				· · · · · · · · · · · · · · · · · · ·						
FLAMMABILITY YESCOMBUSTION	NO X FLAME	S UNDE	R W	HICH CON	DITI	ONS :	THIS PR	RODUCT	DOES	NOT	SUPPORT	
MEANS OF EXTINCTION	NO SPECIAL N	EANS R	EQU	IRED								
FLASHPOINT AND METH	OD		UP (%	PER FLAN	MMABLE LIMIT LOWE UME) N.A. (% B					R FLAMMABLE LIMIT Y VOLUME) N.A.		
AUTOIGNITION TEMP. (C) N.A.		HA	ZARDOUS	COMBUSTION PRODUCTS NONE							
EXPLOSION DATA N.A.	SENSITIVI	TY IMP			ACTIVITY TO STATIC DISCHARGE N.A.							
		SEC	TIO	N 5 - RI						- •		
CHEMICAL STABILITY YES X NO IF N	O, UNDER WHIC								···			
INCOMPATIBILITY WIT YES_ NO X IF S	H OTHER SUBST O WHICH ONESR	ANCES EACTIV	ITY	-								
REACTIVITY AND UNDE	R WHAT CONDIT	IONS: 1	NO I	REACTIVI	TY							
HAZARDOUS DECOMPOSI RELEASED WHEN	TION PRODUCT:	MATER	IAL	IS STAB	LE,	NO POL TERIAL	YMERIZA IS MEL	TION BU	ЈТ ТО	XIC	FUMES MAY BE	

PRODUCT IDENTIFIER SPECTRUM LEAD FREE UNDERGLAZE RAC16 HUNTER GREEN 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 INFLAMATION AND DAMAGE TO KIDNEY AND NERVOUS 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 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 PHONE NUMBER: DATE (GROUP, DEPARTMENT, ETC.) (905) 851-8310 May 7, 2007 TECHNICAL DEPT.