SECTION 1 - PRO	DUCT IDENTIFICA		USE				Ud 5	10	
PRODUCT IDENTIFIER :	SPECTRUM LEAD E	REE 902	ICEBERG			PRO	DOUCT IDENT	IFICA	TION NUMBER 902
PRODUCT USE : CERAMIC	C GLAZE							5	Daberg
MANUFACTURER'S NAME	SPECTRUM GLAZES	INC.		SUP	PLIER'S N	AME SPI	ECTRUM GLAZ		0
STREET ADDRESS: 27	3 BOWES RD, UN	IIT A1		STR	EET ADDR	ESS: 2	73 BOWES F	10, U	NIT A1
CITY: CONCORD	PROVINCE:	ONTARI	0	CIT	Y: CONC	ORD	PROV	INCE	: ONTARIO
POSTAL CODE: L4K1H	8 EMERGENCY TE	L(905)6	95-8355	POS	TAL CODE	: L4K1	H8 EMERGEN	ICY TI	EL (905) 695-8355
SECTION 2 - HAZARDOU	US INGREDIENTS								
HAZARDOUS INGE	AZARDOUS INGREDIENTS % CAS NU				LD5(LC50 OF INGREDIENT (SPECIFY SPECIES)			
sio2		25-33	14808-6	0-7	ILV 15mg	/m3 OSH	A/TWA		
CaO		5-10	1305-78	-8					
Na20		2-5	1313-59	-3					
A1203		3-7	1344-28	-1					
B203		4-8	1303-86	-2					
CuO		.5-1.5	1317-38	-0					
SECTION 3 - PHYSICAL	DATA								
PHYSICAL STATE	ODOUR AND APP							ODOI N.A.	JR THRESHOLD (PPM)
VAPOUR PRESSURE (mm Hg) N.A.	VAPOUR DENSIT	Y	EVAPORATI	ON RA		OILING	POINT(C)	FREI N.A.	EZING POINT(C)
рн 6.5-7	SPECIFIC GRAV	ITY	COEFF. WA	TER/	OIL DIST.				
SECTION 4 - FIRE	AND EXPLOSION D	ATA							
FLAMMABILITY YES NO	X FLAMES UN	DER WHIC	H CONDITIO	NS :	THIS PROD	UCT DOE	S NOT SUPPO	ORT CO	OMBUSTION
MEANS OF EXTINCTION 1	NO SPECIAL MEANS	REQUIRE	D						
FLASHPOINT AND METHON	0		UPPER FLAM						MABLE LIMIT ME) N.A.
AUTOIGNITION TEMP. (C)) N.A.		HAZARDOUS	COMBI	USTION PRO	DUCTS N	IONE		
EXPLOSION DATA N.A.	SENSITIVITY I	MPACT N.	A.	AC	TIVITY TO	STATIC	DISCHARGE	N.A.	
		SEC	CTION 5 - I	REACT	IVITY DAT	A			
CHEMICAL STABILITY YES X NO IF NO,	, under which co	NDITIONS							
INCOMPATIBILITY WITH YES NO X IF SO									
REACTIVITY AND UNDER	WHAT CONDITIONS	: NO REA	CTIVITY						
HAZARDOUS DECOMPOSITI			STABLE, N	O POI	LYMERIZATI	ON BUT	TOXIC FUME:	S MAY	BE RELEASED WHEN

PRODUCT IDENTIFIER SPECTRUM LEAD FREE 902 ICEBERG												
SECTION 6 - TOXICOLOGICAL PROPERTIES												
ROUTE OF ENTRY SKIN CONTACT	SK	IN ABSORPTION X	EYE CONTACT X	INHALATION	INGESTION X							
EFFECTS OF ACUTE EXPOSURE T	O PRODUCT		DUE TO ABRASIVENESS		XIC EFFECTS.							
EFFECTS OF CHRONIC EXPOSURE	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												
TERATOGENCITY	REPRODUC	TIVE TOXICITY	MUTAGENICITY		SYNERGISTIC PRODUCTS							
SECTION 7 - PREVENTIVE ME	ASURES											
PERSONAL PROTECTIVE EQUIPME	ENT:											
GLOVES (SPECIFY) WORK GLOVES RESPIRATOR (SPECIFY) APPROVED DUST MASK SAFETY GLASSES												
FOOTWEAR (SPECIFY)		CLOTHING (SPECIFY)		OTHER (S	PECIFY)							
ENGINEERING CONTROLS (SPECI VENTILATION SHOULD BE USED			PROCESS)									
LEAK AND SPILL PROCEDURE: S	COOP INTO	SUITABLE RECEPTACE	LE. DO NOT WASH DOWN	N DRAIN.								
WASTE DISPOSAL: SEND TO APP	PROVED SIT	E IN ACCORDANCE WIT	TH REGULATIONS.									
HANDLING PROCEDURES AND EQU	IPMENT: N	O SPECIAL EQUIPEMEN	NT NEEDED. FOLLOW ST	TANDARD PI	ANT HYGIENE PROCEDURE.							
STORAGE REQUIREMENTS: STORE	IN DRY A	REAS.										
SPECIAL SHIPPING INFORMATIO	N: PROTEC	T AGAINST PHYSICAL	DAMAGE. DOT LABEL 1	NON-REGULA	TED							
		SECTION 8 - FIR	RST 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 DAT	TE OF MSDS											
PREPARED BY (GROUP, DEPARTME TECHNICAL DEPT.	ENT, ETC.)	PHONE NUMBER: (416)747-8310		DATE 1 AUGUS	T 2012							

SECTION 1 - PRO	DUCT IDENTIFICA	TION AND	USE			1			
PRODUCT IDENTIFIER :	SPECTRUM LEAD	FREE 905	WHEATFIELD			PRODUCT	IDENTIF	ICATION NUMBER 905	
PRODUCT USE : CERAMI	C GLAZE							Wheat	
MANUFACTURER'S NAME	SPECTRUM GLAZE	S INC.		SUP	PLIER'S NAM	ME SPECTRUM	GLAZES	INC.	
STREET ADDRESS: 27 CITY: CONCORD POSTAL CODE: L4K1H	PROVINCE	: ONTAR		CIT	Y: CONCO		PROVIN	UNIT A1 ICE: ONTARIO 7 TEL(905)695-8355	
SECTION 2 - HAZARDO	US INGREDIENTS								
HAZARDOUS ING	REDIENTS	8	CAS NUI	MBER		OF INGREDIA		LC50 OF INGREDIENT (SPECIFY SPECIES)	
SiO2		25-33	14808-6	14808-60-7 ILV 15mg/m3 OSHA/TWA					
CaO		5-10	1305-78	1305-78-8					
Na2O		2-5	1313-59	-3					
A1203		3-7	1344-28	1-1					
B203		4-8	1303-86	5-2					
MgO		1-2	1309-48	-48-4					
Fe203		1-2	1309-37	-37-1					
ZnO		7-9	1314-13-2						
SECTION 3 - PHYSICAL	DATA								
PHYSICAL STATE LIQUID	ODOUR AND APPODE							ODOUR THRESHOLD (PPM)	
VAPOUR PRESSURE (mm Hg) N.A.	VAPOUR DENSIT	ry	EVAPORATI	ION R		ILING POINT		FREEZING POINT(C)	
рН 6.5-7	SPECIFIC GRAV	VITY	COEFF. WA	ATER/	OIL DIST.				
SECTION 4 - FIRE	AND EXPLOSION D	ATA							
FLAMMABILITY YES N	O X FLAMES U	NDER WHI	CH CONDITIO	ONS :	THIS PRODU	OCT DOES NOT	SUPPORT	COMBUSTION	
MEANS OF EXTINCTION	NO SPECIAL MEAN	S REQUIR	ED						
FLASHPOINT AND METHO NONE	D		UPPER FLAM					LAMMABLE LIMIT OLUME) N.A.	
AUTOIGNITION TEMP. (C) N.A.		HAZARDOUS	COMB	USTION PROI	DUCTS NONE			
EXPLOSION DATA N.A.	SENSITIVITY	IMPACT N	.A.	AC	TIVITY TO	STATIC DISC	HARGE N.	Α.	
		SI	CTION 5 -	REACT	IVITY DATA				
CHEMICAL STABILITY YES X NO IF NO	, UNDER WHICH C	ONDITION	s						
INCOMPATIBILITY WITH YES NO X IF SO									
REACTIVITY AND UNDER	WHAT CONDITION	S: NO RE	ACTIVITY						
HAZARDOUS DECOMPOSIT	ION PRODUCT: MA	TERIAL I	S STABLE, N IS MELTED.	NO PO	LYMERIZATIO	ON BUT TOXIC	FUMES N	MAY BE RELEASED WHEN	

	OPERTIES				
ROUTE OF ENTRY SKIN CONTACT	SK	IN ABSORPTION X	EYE CONTACT X	INHALATIO	INGESTION X
EFFECTS OF ACUTE EXPOSURE TO	PRODUCT		DUE TO ABRASIVENESS JLD CAUSE IRRITATION		OXIC EFFECTS.
EFFECTS OF CHRONIC EXPOSURE	ro PRODU		N THE VAPOURS FROM F ND DAMAGE TO KIDNEY		
EXPOSURE LIMITS	IRRITANC	Y OF PRODUCT	SENSITIZATION TO	PRODUCT	CARCINOGENICITY
TERATOGENCITY	REPRODUC	TIVE TOXICITY	MUTAGENICITY		SYNERGISTIC PRODUCTS
SECTION 7 - PREVENTIVE MEAN	SURES				
PERSONAL PROTECTIVE EQUIPMENT	r:				
GLOVES (SPECIFY) WORK GLOVES		RESPIRATOR (SPEC		EYE (SPI SAFETY (
FOOTWEAR (SPECIFY)		CLOTHING (SPECIF	Y)	OTHER (S	SPECIFY)
ENGINEERING CONTROLS (SPECIFY VENTILATION SHOULD BE USED WI LEAK AND SPILL PROCEDURE: SC	HEN SPRA	YING GLAZES.		N DRAIN	
DEAR AND SPILL PROCEDURE. SO				n biutani	
WASTE DISPOSAL: SEND TO APPRO					
	PMENT: N	O SPECIAL EQUIPEM	ENT NEEDED. FOLLOW S	TANDARD P	LANT HYGIENE PROCEDURE.
WASTE DISPOSAL: SEND TO APPRO HANDLING PROCEDURES AND EQUIP STORAGE REQUIREMENTS: STORE			ENT NEEDED. FOLLOW S	TANDARD P	ANT HYGIENE PROCEDURE.
HANDLING PROCEDURES AND EQUI	IN DRY A	REAS.			
HANDLING PROCEDURES AND EQUIPMENTS: STORE	IN DRY A	REAS. T AGAINST PHYSICA			
HANDLING PROCEDURES AND EQUIPMENTS: STORE	IN DRY A : PROTEC TAINS THE EDIENT D OXIC FOR STANCE).	REAS. T AGAINST PHYSICA SECTION 8 - F E OXIDES LISTED II ISCLOSURE LIST, OI M EVEN THOUGH TES' THE OXIDES ARE P	L DAMAGE, DOT LABEL IRST AID MEASURES N THE CHEMICAL FORMU NCE THESE OXIDES ARE FING WOULD DETECT TH RESENT IN THE FORM O	NON-REGULA LA IN FORI FUSED ANI E PRESENCI F A SINTE	ATED M OF CERAMIC FRIT. SOME OF CONVERTED INTO FRIT THEY OF THESE OXIDES. (FRIT IS
HANDLING PROCEDURES AND EQUIPMENTS: STORE STORE SPECIAL SHIPPING INFORMATION SPECIFIC MEASURES: GLAZE CONTHESE OXIDES ARE ON THE INGRAPE NO LONGER AVAILABLE IN TRESENTIALLY AN INSOLUBLE SUBSE	: PROTEC TAINS THEDIENT DOXIC FOR STANCE). S ARE PR	SECTION 8 - FOR SECTION 8 - FO	L DAMAGE, DOT LABEL IRST AID MEASURES N THE CHEMICAL FORMU NCE THESE OXIDES ARE FING WOULD DETECT TH RESENT IN THE FORM O	NON-REGULA LA IN FORI FUSED ANI E PRESENCI F A SINTE	ATED M OF CERAMIC FRIT. SOME OF CONVERTED INTO FRIT THEY OF THESE OXIDES. (FRIT IS

SECTION 1 - PRO	DUCT IDENTIFICA	TION AND	USE					
PRODUCT IDENTIFIER :	SPECTRUM LEAD	FREE 909	CAMEL			PRODUCT	T IDENTI	FICATION NUMBER 909
PRODUCT USE : CERAMIC	GLAZE							Camel
MANUFACTURER'S NAME	SPECTRUM GLAZE	S INC.		SUP	PLIER'S N	AME SPECTRU	JM GLAZE	
STREET ADDRESS: 27	PROVINCE	: ONTAR		CIT	Y: CON		PROVI	NCE: ONTARIO Y TEL(905)695-8355
SECTION 2 - HAZARDOU	S INGREDIENTS							
HAZARDOUS INGE	REDIENTS & CAS NUMBER LD50 OF 1					O OF INGREDI		LC50 OF INGREDIENT (SPECIFY SPECIES)
S102		25-33	14808-6	14808-60-7 ILV 15mg/m3 OSHA/TWA				
CaO		5-10	1305-78	-8				
Na20		5-B	1313-59	-3				
A1203		3-7	1344-28	-1				
8203		4-8	1303-86	-2				
ZnO		3-5	1314~13	4~13~2				
Fe203		1-3	1309-37	-1				
SECTION 3 - PHYSICAL	DATA							
PHYSICAL STATE LIQUID	ODOUR AND APP							ODOUR THRESHOLD (PPM) N.A.
VAPOUR PRESSURE (mm Hg) N.A.	VAPOUR DENSIT	ry	EVAPORATI N.A.	ON RA		BOILING POIN	T(C)	FREEZING POINT(C) N.A.
рн 6.5-7	SPECIFIC GRAV	/ITY	COEFF. WA	TER/	OIL DIST.			
SECTION 4 - FIRE	AND EXPLOSION D	ATA			C. L.			
FLAMMABILITY YESNO	X FLAMES U	NDER WHI	CH CONDITIO	NS :	THIS PRO	DUCT DOES NO	T SUPPOR	RT COMBUSTION
MEANS OF EXTINCTION N	NO SPECIAL MEAN	S REQUIR	ED					
FLASHPOINT AND METHOR			UPPER FLAM					FLAMMABLE LIMIT VOLUME) N.A.
AUTOIGNITION TEMP. (C)	N.A.		HAZARDOUS	COMBI	USTION PE	ODUCTS NONE		
EXPLOSION DATA N.A.	SENSITIVITY	IMPACT N	. х.	AC	TIVITY TO	STATIC DISC	CHARGE N	A.
		81	ECTION 5 -	REACT	IVITY DA	ra .		
CHEMICAL STABILITY YES X NO IF NO,	UNDER WHICH C	ONDITION	S					
INCOMPATIBILITY WITH								
YES_ NO X IF SO								
YES_ NO X IF SO REACTIVITY AND UNDER		S: NO RE	ACTIVITY					

PRODUCT IDENTIFIER SPECTRUM	LEAD FRE	E 909 CAMEL								
SECTION 6 - TOXICOLOGICAL F	ROPERTIES									
ROUTE OF ENTRY SKIN CONTACT	SK	IN ABSORPTION X	EYE CONTACT X	NHALATION	INGESTION X					
EFFECTS OF ACUTE EXPOSURE T	O PRODUCT	: SKIN IRRITATION I EYE EXPOSURE COUL	DUE TO ABRASIVENESS. D CAUSE IRRITATION	BUT NO TO	OXIC EFFECTS.					
EFFECTS OF CHRONIC EXPOSURE	TO PRODUC	CT: METAL FUMES IN INFLAMATION AND	THE VAPOURS FROM FI DAMAGE TO KIDNEY	RING CERA	MIC GLAZES MAY CAUSE LUNG US SYSTEM.					
EXPOSURE LIMITS IRRITANCY OF PRODUCT SENSITIZATION TO PRODUCT CARCINOGENICITY										
TERATOGENCITY	REPRODUC	TIVE TOXICITY	MUTAGENICITY		SYNERGISTIC PRODUCTS					
SECTION 7 - PREVENTIVE ME	ASURES									
PERSONAL PROTECTIVE EQUIPME	ENT:									
GLOVES (SPECIFY) WORK GLOVES		RESPIRATOR (SPECI APPROVED DUST MAS		EYE (SPE						
FOOTWEAR (SPECIFY)		CLOTHING (SPECIFY)	OTHER (S	SPECIFY)					
ENGINEERING CONTROLS (SPECI			PROCESS)							
LEAK AND SPILL PROCEDURE: S	COOP INTO	SUITABLE RECEPTACI	LE. DO NOT WASH DOWN	N DRAIN.						
WASTE DISPOSAL: SEND TO APP	ROVED SIT	E IN ACCORDANCE WIT	TH REGULATIONS.							
HANDLING PROCEDURES AND EQU	IPMENT: N	O SPECIAL EQUIPEMEN	T NEEDED. FOLLOW ST	TANDARD PI	ANT HYGIENE PROCEDURE.					
STORAGE REQUIREMENTS: STORE	IN DRY A	REAS.								
SPECIAL SHIPPING INFORMATIO	N: PROTEC	T AGAINST PHYSICAL	DAMAGE. DOT LABEL I	NON-REGULA	ATED					
		SECTION 8 - FIR	RST 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 DAT	TE OF MSDS									
PREPARED BY (GROUP, DEPARTME TECHNICAL DEPT.	ENT, ETC.)	PHONE NUMBER: (416)747-8310		DATE 1 AUGUS	TT 2012					

			TINU DAL	211	DAIA S	HEEL		
SECTION 1 - PRO	DUCT IDENTIFICA	TION AND	USE					
PRODUCT IDENTIFIER :	SPECTRUM LEAD	FREE 910	DESERT			PRODUCT	IDENTIF	CATION NUMBER 910
PRODUCT USE : CERAMIC	GLAZE							Desert
MANUFACTURER'S NAME	SPECTRUM GLAZES	S INC.		SUP	PLIER'S NA	AME SPECTRU	M GLAZES	INC.
STREET ADDRESS: 27	BOWES RD, UN	NIT A1		STR	REET ADDR	ESS: 273 B	OWES RD,	UNIT A1
CITY: CONCORD	PROVINCE	ONTAR	Ю	CIT	Y: CONC	ORD	PROVIN	CE: ONTARIO
POSTAL CODE: L4K1H	8 EMERGENCY TH	EL (905)	695-8355	POS	TAL CODE	: L4K1H8 E	MERGENCY	TEL (905) 695-8355
SECTION 2 - HAZARDON	JS INGREDIENTS							
HAZARDOUS ING	REDIENTS	8	CAS NUM	MBER		OF INGREDI		LC50 OF INGREDIENT (SPECIFY SPECIES)
SiO2		25-33	14808-6	14808-60-7 ILV 15mg/m3 OSH				
Ca0		5-10	1305-78	1305-78-8				
Na20		2-5	1313-59)-3				
A1203		3-7	1344-28	3-1				
B203		4-8	1303-86	1303-86-2				
ZnO		10-13	1314-13	1314-13-2				
Fe203		.5-1.5	1309-37	1309-37-1				
MgO		1-2	1309-48	1309-48-4				
ZrO2	100	4-6	1314-23	1314-23-4				
700								
SECTION 3 - PHYSICAL	DATA							
PHYSICAL STATE LIQUID	ODOUR AND APP							DOUR THRESHOLD (PPM)
VAPOUR PRESSURE (mm Hg) N.A.	VAPOUR DENSIT	Y	EVAPORATI N.A.	ION R		OILING POINT		FREEZING POINT(C)
рн 6.5-7	SPECIFIC GRAV	TITY	COEFF. WA	ATER/	OIL DIST.			
SECTION 4 - FIRE	AND EXPLOSION D	ATA						
FLAMMABILITY YES NO	O X FLAMES U	NDER WHI	CH CONDITIO	ONS :	THIS PROD	OUCT DOES NO	T SUPPORT	COMBUSTION
MEANS OF EXTINCTION I				-				
FLASHPOINT AND METHON	D		UPPER FLAM				1	LAMMABLE LIMIT OLUME) N.A.
AUTOIGNITION TEMP. (C) N.A.		HAZARDOUS	COMB	USTION PRO	DUCTS NONE		
EXPLOSION DATA N.A.	SENSITIVITY	IMPACT N	.A.	AC	TIVITY TO	STATIC DISC	HARGE N.	۸.
		SI	ECTION 5 -	REACT	IVITY DAT	A		
CHEMICAL STABILITY YES X NO IF NO.	, UNDER WHICH CO	ONDITION	s					
INCOMPATIBILITY WITH YES_ NO X IF SO								
REACTIVITY AND UNDER	WHAT CONDITION	S: NO RE	ACTIVITY					
HAZARDOUS DECOMPOSIT			S STABLE, N		LYMERIZATI	ON BUT TOXI	C FUMES M	AY BE RELEASED WHEN

PRODUCT IDENTIFIER SPECTRUM	LEAD FRE	E 910 DESERT									
SECTION 6 - TOXICOLOGICAL F	ROPERTIES										
ROUTE OF ENTRY SKIN CONTACT	SK	IN ABSORPTION X	EYE CONTACT X	NHALATION	INGESTION X						
EFFECTS OF ACUTE EXPOSURE T	O PRODUCT		DUE TO ABRASIVENESS. LD CAUSE IRRITATION		OXIC 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											
TERATOGENCITY	REPRODUC	TIVE TOXICITY	MUTAGENICITY		SYNERGISTIC PRODUCTS						
SECTION 7 - PREVENTIVE ME	ASURES										
PERSONAL PROTECTIVE EQUIPME	NT:										
GLOVES (SPECIFY) WORK GLOVES		RESPIRATOR (SPECI APPROVED DUST MAS		EYE (SPE SAFETY G							
FOOTWEAR (SPECIFY)		CLOTHING (SPECIFY)	OTHER (S	SPECIFY)						
ENGINEERING CONTROLS (SPECI VENTILATION SHOULD BE USED			PROCESS)								
LEAK AND SPILL PROCEDURE: S	COOP INTO	SUITABLE RECEPTACI	LE. DO NOT WASH DOWN	DRAIN.							
WASTE DISPOSAL: SEND TO APE	ROVED SIT	E IN ACCORDANCE WIT	TH REGULATIONS.								
HANDLING PROCEDURES AND EQU	IPMENT: N	O SPECIAL EQUIPEMEN	NT NEEDED. FOLLOW ST	ANDARD PI	ANT HYGIENE PROCEDURE.						
STORAGE REQUIREMENTS: STORE	IN DRY A	REAS.									
SPECIAL SHIPPING INFORMATIO	N: PROTEC	T AGAINST PHYSICAL	DAMAGE. DOT LABEL N	ION-REGULA	TED						
		SECTION 8 - FIR	RST 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 DAT	E OF MSDS										
PREPARED BY (GROUP, DEPARTME TECHNICAL DEPT.	NT, ETC.)	PHONE NUMBER: (416)747-8310		DATE 1 AUGUS	T 2012						

SECTION 1 - PRODU	UCT IDENTIFICA		USE						-
PRODUCT IDENTIFIER : S	PECTRUM LEAD	FREE 911	STAR DUST				PRODUCT	DENTIF	ICATION NUMBER 911
PRODUCT USE : CERAMIC	GLAZE								Stardust
MANUFACTURER'S NAME S	PECTRUM GLAZE	S INC.		SUP	PLIER'S 1	NAME	SPECTRUM	GLAZES	INC.
STREET ADDRESS: 273	BOWES RD, U	NIT A1		STR	EET ADD	RESS:	273 BOV	VES RD	, UNIT A1
CITY: CONCORD	PROVINCE	: ONTART	0	CIT	Y: CON	CORD		PROVI	NCE: ONTARIO
POSTAL CODE: L4K1H8									Y TEL(905)695-83
SECTION 2 - HAZARDOUS		32(303)0	75 0555	100	IND COD	D. D.	NATIO BIN	MODITO.	1 1111(700)(070)
HAZARDOUS INGRE		8	CAS NUM	BER			INGREDIE		LC50 OF INGRED
	,		(SPECIFY SPECIES AND ROUTE) 15-33 14808-60-7 ILV 15mg/m3 OSHA/TWA						(SPECIFY SPECI
SiO2		25-33	14808-6	_	ILV 15m	ng/m3 C	OSHA/TWA		
CaO		5-10	1305-78	-8					-
Na20		2-5	1313-59	-3					
A1203		3-7	1344-28	-1					
B203		4-8	1303-86	-2					
ZnO		10-13	1314-13	-2					
Fe203		.5-1.5	.5 1309-37-1						
MgO		1-2	1309-48	-4					
ZrO2		4-6	1314-23-4						
CERAMIC STAIN - BLUE		.0205	68186-8	7-8					
SECTION 3 - PHYSICAL D	ATA								
PHYSICAL STATE	ODOUR AND APP								ODOUR THRESHOLD (PE
VAPOUR PRESSURE (mm Hg) N.A.	VAPOUR DENSIT	Y	EVAPORATI	ON RA		BOILIN	G POINT (FREEZING POINT(C) N.A.
рн 6.5-7	SPECIFIC GRAV	/ITY	COEFF. WA	TER/O	OIL DIST.	,			
SECTION 4 - FIRE A	ND EXPLOSION D	ATA					-		
FLAMMABILITY YES_ NO	X FLAMES U	NDER WHIC	CH CONDITIO	NS :	THIS PRO	DDUCT I	DOES NOT	SUPPOR	T COMBUSTION
MEANS OF EXTINCTION NO					,				
FLASHPOINT AND METHOD			UPPER FLAM						FLAMMABLE LIMIT VOLUME) N.A.
AUTOIGNITION TEMP. (C)	N.A.		HAZARDOUS			RODUCTS	S NONE		
EXPLOSION DATA N.A.	SENSITIVITY	IMPACT N.	А.	AC	TIVITY TO	O STAT	IC DISCH	ARGE N.	Α.
		SE	CTION 5 - 1	REACT	IVITY DA	TA			
CHEMICAL STABILITY YES X NO_ IF NO,	UNDER WHICH C	ONDITIONS	3						14400
INCOMPATIBILITY WITH C	THER SUBSTANC	ES							
REACTIVITY AND UNDER W	HAT CONDITION	S: NO REA	CTIVITY						

PRODUCT IDENTIFIER SPECTRUM	LEAD FREI	E 911 STAR DUST			
SECTION 6 - TOXICOLOGICAL P	ROPERTIES				
ROUTE OF ENTRY SKIN CONTACT	SK	IN ABSORPTION X	EYE CONTACT X	INHALATION	INGESTION X
EFFECTS OF ACUTE EXPOSURE T	O PRODUCT		DUE TO ABRASIVENESS. LD CAUSE IRRITATION		XIC EFFECTS.
EFFECTS OF CHRONIC EXPOSURE	TO PRODUC		THE VAPOURS FROM FI DAMAGE TO KIDNEY		
EXPOSURE LIMITS	IRRITANC	Y OF PRODUCT	SENSITIZATION TO	PRODUCT	CARCINOGENICITY
TERATOGENCITY	REPRODUC	TIVE TOXICITY	MUTAGENICITY		SYNERGISTIC PRODUCTS
SECTION 7 - PREVENTIVE ME	ASURES				
PERSONAL PROTECTIVE EQUIPME	NT:				
GLOVES (SPECIFY) WORK GLOVES		RESPIRATOR (SPECI APPROVED DUST MAS		EYE (SPE SAFETY G	
FOOTWEAR (SPECIFY)		CLOTHING (SPECIFY)	OTHER (S	PECIFY)
ENGINEERING CONTROLS (SPECI VENTILATION SHOULD BE USED			PROCESS)		
LEAK AND SPILL PROCEDURE: S	COOP INTO	SUITABLE RECEPTACE	LE. DO NOT WASH DOWN	DRAIN.	
WASTE DISPOSAL: SEND TO APP	ROVED SIT	E IN ACCORDANCE WIT	TH REGULATIONS.		
HANDLING PROCEDURES AND EQU	IPMENT: NO	SPECIAL EQUIPEMEN	NT NEEDED. FOLLOW ST	randard pl	ANT HYGIENE PROCEDURE.
STORAGE REQUIREMENTS: STORE	IN DRY A	REAS.			
SPECIAL SHIPPING INFORMATIO	N: PROTECT	AGAINST PHYSICAL	DAMAGE. DOT LABEL N	NON-REGULA	TED
		SECTION 8 - FIF	RST AID MEASURES		
SPECIFIC MEASURES: GLAZE CO THESE OXIDES ARE ON THE ING ARE NO LONGER AVAILABLE IN ESSENTIALLY AN INSOLUBLE SU SOLUBILITY. THESE INGREDIEN	REDIENT DE TOXIC FORM BSTANCE).	SCLOSURE LIST, ONG 4 EVEN THOUGH TEST! THE OXIDES ARE PRE	CE THESE OXIDES ARE ING WOULD DETECT THE ESENT IN THE FORM OF	FUSED AND PRESENCE	CONVERTED INTO FRIT THEY OF THESE OXIDES. (FRIT IS
SECTION 9 - PREPARATION DAT	E OF MSDS				
PREPARED BY (GROUP, DEPARTME TECHNICAL DEPT.	NT, ETC.)	PHONE NUMBER: (416)747-8310		DATE 1 AUGUS	T 2012
4		**************************************			

		PIATE	KIAL SAF	ETI	DATA	UPPT			
SECTION 1 - PRO	DUCT IDENTIFIC	ATION AND	USE						
PRODUCT IDENTIFIER :	SPECTRUM LEAD	FREE 913	OLD COPPER	1		PRODUC	T IDENTI	FICATION N	UMBER 913
PRODUCT USE : CERAMIC	GLAZE							010	d Copper
MANUFACTURER'S NAME	SPECTRUM GLAZE	S INC.		SUP	PLIER'S	IAME SPECTR	UM GLAZE	ES INC.	
STREET ADDRESS: 27	3 BOWES RD, U	NIT A1		STR	REET ADD	RESS: 273 I	BOWES R	D, UNIT A	l
CITY: CONCORD	PROVINCE	: ONTAR	IO	CIT	Y: CON	CORD	PROV	INCE: ONTA	ARIO
POSTAL CODE: L4K1H	8 EMERGENCY I	EL (905)	695-8355	POS	TAL CODE	E: L4K1H8 E	EMERGEN	CY TEL(905	5) 695-8355
SECTION 2 - HAZARDOU	S INGREDIENTS					with water			
HAZARDOUS INGR						0 OF INGRED Y SPECIES A			OF INGREDIENT IFY SPECIES)
sio2		25-33	14808-6	ILV 15m	g/m3 OSHA/T	WA			
CaO		5-10	1305-78	-8					
Na20 '		2-5	1313-59	-3					
A1203		3-7	1344-28	-1					
B203		4-8	1303-86	-2					
ZnO		19-23	1314-13	-2				1	
Fe203		.5-1.5	.5 1309-37-1						
MgO		1-2	1309-48-4						
ZrO2		6-9	1314-23-4						
MnO2		.25-1	1 1313-13-9						
CuO		1-2	1317-38	-0					
SECTION 3 - PHYSICAL	DATA								
PHYSICAL STATE LIQUID	ODOUR AND AP							ODOUR THR	ESHOLD (PPM)
VAPOUR PRESSURE (mm Hg) N.A.	VAPOUR DENSI (AIR=1)	TY	EVAPORATI	ON RA		BOILING POIN	T(C)	FREEZING N.A.	POINT(C)
рн 6.5-7	SPECIFIC GRA	VITY	COEFF. WA	TER/	OIL DIST.				
SECTION 4 - FIRE		DATA							
FLAMMABILITY YES_ NO	-		CH CONDITIO	NS :	THIS PRO	DUCT DOES NO	OT SUPPO	RT COMBUST	ION
MEANS OF EXTINCTION N					-				
FLASHPOINT AND METHOU			UPPER FLAM					FLAMMABLE VOLUME) N.	
AUTOIGNITION TEMP. (C)	N.A.		HAZARDOUS	СОМВ	USTION PR	ODUCTS NONE			
EXPLOSION DATA N.A.	SENSITIVITY	IMPACT N	.A.	AC	TIVITY TO	STATIC DIS	CHARGE N	I.A.	
		SI	ECTION 5 - :	REACT	IVITY DA	ra .			
CHEMICAL STABILITY YES X NO IF NO,	UNDER WHICH O	CONDITION	s						
INCOMPATIBILITY WITH YES NO X IF SO									
REACTIVITY AND UNDER	WHAT CONDITION	S: NO RE	ACTIVITY						
HAZARDOUS DECOMPOSITI			S STABLE, N		LYMERIZAT	ION BUT TOX	C FUMES	MAY BE REI	LEASED WHEN
					-				

PRODUCT IDENTIFIER SPECTRUM LEAD FREE 913 OLD COPPER										
SECTION 6 - TOXICOLOGICAL PROPERTIES										
ROUTE OF ENTRY SKIN CONTACT	SK	IN ABSORPTION X	EYE CONTACT X	INHALATION	INGESTION X					
EFFECTS OF ACUTE EXPOSURE T	O PRODUCT		UE TO ABRASIVENESS D CAUSE IRRITATION		XIC EFFECTS.					
EFFECTS OF CHRONIC EXPOSURE	TO PRODUC		THE VAPOURS FROM F DAMAGE TO KIDNEY							
EXPOSURE LIMITS IRRITANCY OF PRODUCT SENSITIZATION TO PRODUCT CARCINOGENICITY										
TERATOGENCITY	REPRODUC	TIVE TOXICITY	MUTAGENICITY		SYNERGISTIC PRODUCTS					
SECTION 7 - PREVENTIVE ME	ASURES									
PERSONAL PROTECTIVE EQUIPME	NT:									
GLOVES (SPECIFY) WORK GLOVES		RESPIRATOR (SPECI APPROVED DUST MAS		EYE (SPE SAFETY G						
FOOTWEAR (SPECIFY)		CLOTHING (SPECIFY)	OTHER (S	PECIFY)					
ENGINEERING CONTROLS (SPECI VENTILATION SHOULD BE USED	FY, EG. VEI WHEN SPRA	NTILATION, ENCLOSED	PROCESS)							
LEAK AND SPILL PROCEDURE: S	COOP INTO	SUITABLE RECEPTACE	E. DO NOT WASH DOW	N DRAIN.						
WASTE DISPOSAL: SEND TO APE	PROVED SIT	E IN ACCORDANCE WIT	TH REGULATIONS.							
HANDLING PROCEDURES AND EQU	IPMENT: N	O SPECIAL EQUIPEMEN	T NEEDED. FOLLOW S	TANDARD PL	ANT HYGIENE PROCEDURE.					
STORAGE REQUIREMENTS: STORE	IN DRY A	REAS.								
SPECIAL SHIPPING INFORMATIO	N; PROTEC	T AGAINST PHYSICAL	DAMAGE, DOT LABEL	NON-REGULA	TED					
		SECTION 8 - FIR	RST 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 DAT	E OF MSDS									
PREPARED BY (GROUP, DEPARTME TECHNICAL DEPT.	ENT, ETC.)	PHONE NUMBER: (416_747-8310		DATE 1 AUGUS	т 2012					