MATERIAL SAFETY DATA SHEET



4700 W. 160TH Street P.O. Box 35906 Cleveland, Ohio 44135 Emergency Tel No. (303) 623-5716 Collect

	_			,	3) 623-5/16 Collect
	on Date06/	06/00	Date of	Issue	01/17/03
			OF WIMPOLIL		
Section 1			OF MATERIAL		
	SAFE-FLC SILVER LEAD-		3, 53064, 53094, 53096,	: 1007 E2000 E21E4	67155
FORMULA		50663, 33061, 53062	, 53064, 53094, 53096, S	22097, 23029, 23134,	33133
•	Lead-Pree Wire Solder				
		=======		=========	=======
SECTION_2		HAZARDOUS I	NGREDIENTS		
INGREDIENTS		8	CAS NUMBE	<u>se</u>	<u>C 313</u>
Tin (*Non-Hazardou	s)	>90%	7440~31-5	5	No
Copper (*Non-Hazar	dous)	<5%	7440~50-1		Yes
Bismuth (*Non-Haza		<5%	7440-69-		No
Silver (*Non-Hazar		<5%	7440-22	, ===========	Yes
SECTION 3		HAZARDS UND			
SECTION 3	11101111	THURTHUN CHIL	ER ZJ CIR IJIO	.1200	
HAZARDS	YES	<u>NO</u>	HAZARDS	YES	NO
Combustible Liquid	1.00	<u>x</u>	Skin Hazard	<u> </u>	endated:
Plammable Material		x	Eye Hazard	x	
Pyrophoric Material		x	Toxic Agent		x
Explosive Material		x	Highly Toxic Agent		x
Unstable Material		x	Sensitizer		x
Water Reactive Mate	rial	x	Kidney Toxin	x	
Oxidizer		x	Reproductive Toxin		x
Organic Peroxide		×	Blood Toxin		x
Corrosive Material		x	Nervous System Toxii		x
Compressed Gas		x	Lung Toxin	x	
Irritant	X		Liver Toxin	x	
Carcinogen NTP/IARC		X fluving operations	Lung Hazard s due to fumes from flux	if overheated	
or misused.	y be nazardous darrng	Truxing Operations	die to rames from frax	II Overheaced	
					=========
CTION 4			ATION		The state was both year are the sea are state and the
					- Title dans men blife sam een uit gen een blike tage met blie
	TLV (TWA)			STEL	Hazard Action Level
CHEMICAL Tin (Inorganic)	TLV (TWA) 2.0 mg/cu m	REGUL PEL 2.0 mg/	ATION	STEL N/A	
CHEMICAL	TLV (TWA) 2.0 mg/cu m 0.1 mg/cu m (Fume)	PEL 2.0 mg/ 0.1 mg/	Ccu m (Fume)	STEL N/A N/A	
CTION 4 CHEMICAL Tin (Inorganic) Copper	TLV (TWA) 2.0 mg/cu m 0.1 mg/cu m (Fume) 1.0 mg/cu m (Dust)	PEL 2.0 mg/ 0.1 mg/ 1.0 mg/	ATION	STEL N/A N/A N/A	
CTION 4 CHEMICAL Tin (Inorganic) Copper Bismuth	TLV (TWA) 2.0 mg/cu m 0.1 mg/cu m (Fume) 1.0 mg/cu m (Dust) No TLV established	PEL 2.0 mg/ 0.1 mg/ 1.0 mg/ N/A	cu m (Fume) (cu m (Dust)	STEL N/A N/A N/A N/A	
CTION 4 CHEMICAL Tin (Inorganic) Copper Bismuth Silver	TLV (TWA) 2.0 mg/cu m 0.1 mg/cu m (Fume) 1.0 mg/cu m (Dust)	PEL 2.0 mg/ 0.1 mg/ 1.0 mg/	cu m (Fume) (cu m (Dust)	STEL N/A N/A N/A	
CTION 4 CHEMICAL Tin (Inorganic) Copper Bismuth Silver	TLV (TWA) 2.0 mg/cu m 0.1 mg/cu m (Fume) 1.0 mg/cu m (Dust) No TLV established	PEL 2.0 mg/ 0.1 mg/ 1.0 mg/ N/A 0.01 mg	Cu m (cu m (Fume) (cu m (Dust)	STEL N/A N/A N/A N/A	
CTION 4 CHEMICAL Tin (Inorganic) Copper Bismuth Silver SECTION 5	TLV (TWA) 2.0 mg/cu m 0.1 mg/cu m (Fume) 1.0 mg/cu m (Dust) No TLV established 0.01 mg/cu m	PEL 2.0 mg/ 0.1 mg/ 1.0 mg/ N/A 0.01 mg	cu m (Fume) (cu m (Dust)	STEL N/A N/A N/A N/A	
CTION 4 CHEMICAL Tin (Inorganic) Copper Bismuth Silver SECTION 5 DOT PROPER SHIPPING	TLV (TWA) 2.0 mg/cu m 0.1 mg/cu m (Fume) 1.0 mg/cu m (Dust) No TLV established 0.01 mg/cu m	PEL 2.0 mg/ 0.1 mg/ 1.0 mg/ N/A 0.01 mg	Cu m (cu m (Fume) (cu m (Dust)	STEL N/A N/A N/A N/A	
CTION 4 CHEMICAL Tin (Inorganic) Copper Bismuth Silver SECTION 5	TLV (TWA) 2.0 mg/cu m 0.1 mg/cu m (Fume) 1.0 mg/cu m (Dust) No TLV established 0.01 mg/cu m	PEL 2.0 mg/ 0.1 mg/ 1.0 mg/ N/A 0.01 mg	Cu m (cu m (Fume) (cu m (Dust)	STEL N/A N/A N/A N/A	
CTION 4 CHEMICAL Tin (Inorganic) Copper Bismuth Silver SECTION 5 DOT PROPER SHIPPING DOT HAZARD CLASS	TLV (TWA) 2.0 mg/cu m 0.1 mg/cu m (Fume) 1.0 mg/cu m (Dust) No TLV established 0.01 mg/cu m NAME	PEL 2.0 mg/ 0.1 mg/ 1.0 mg/ N/A 0.01 mg	Cu m (cu m (Fume) (cu m (Dust)	STEL N/A N/A N/A N/A	
CTION 4 CHEMICAL Tin (Inorganic) Copper Bismuth Silver SECTION 5 DOT PROPER SHIPPING DOT HAZARD CLASS SHIPPING ID NUMBER. SHIPPING ID NUMBER EPA HAZARDOUS WASTE EPA HAZARD WASTE CL	TLV (TWA) 2.0 mg/cu m 0.1 mg/cu m (Fume) 1.0 mg/cu m (Dust) NO TLV established 0.01 mg/cu m N/A N/A N/A ID NUMBER. N/A ASS. N/A	PEL 2.0 mg/ 0.1 mg/ 1.0 mg/ N/A 0.01 mg	Cu m (cu m (Fume) (cu m (Dust)	STEL N/A N/A N/A N/A	
CTION 4 CHEMICAL Tin (Inorganic) Copper Bismuth Silver SECTION 5 DOT PROPER SHIPPING DOT HAZARD CLASS SHIPPING ID NUMBER EPA HAZARDOUS WASTE EPA HAZARD WASTE CL	TLV (TWA) 2.0 mg/cu m 0.1 mg/cu m (Fume) 1.0 mg/cu m (Dust) NO TLV established 0.01 mg/cu m N/A N/A N/A ID NUMBER. N/A ASS. N/A	REGUL PEL 2.0 mg/ 0.1 mg/ 1.0 mg/ N/A 0.01 mg/ REGULATED	Ccu m (cu m (Fume) (cu m (Dust) g/cu m IDENTIFICATION	STEL N/A N/A N/A N/A	
CTION 4 CHEMICAL Tin (Inorganic) Copper Bismuth Silver SECTION 5 DOT PROPER SHIPPING DOT HAZARD CLASS SHIPPING ID NUMBER. EPA HAZARDOUS WASTE EPA HAZARD WASTE CL	TLV (TWA) 2.0 mg/cu m 0.1 mg/cu m (Fume) 1.0 mg/cu m (Dust) No TLV established 0.01 mg/cu m	REGUL PEL 2.0 mg/ 0.1 mg/ 1.0 mg/ N/A 0.01 mg REGULATED	ATION /cu m /cu m (Fume) /cu m (Dust) g/cu m IDENTIFICATION OF EXPOSURE	STEL N/A N/A N/A N/A	
CHEMICAL Tin (Inorganic) Copper Bismuth Silver SECTION 5 DOT PROPER SHIPPING DOT HAZARD CLASS SHIPPING ID NUMBER. EPA HAZARDOUS WASTE EPA HAZARD WASTE CL SECTION 6 ENTRY ROUTE IN	TLV (TWA) 2.0 mg/cu m 0.1 mg/cu m (Fume) 1.0 mg/cu m (Dust) No TLV established 0.01 mg/cu m NAME	REGUI PEL 2.0 mg/ 0.1 mg/ 1.0 mg/ N/A 0.01 mg REGULATED EFFECTS YES SKIN - YES	Cu m (cu m (cu m (Pume) (cu m (Dust) g/cu m IDENTIFICATION OF EXPOSURE E BYE YES	STEL N/A N/A N/A N/A N/A N/A N/A	Hazard Action Level
CTION 4 CHEMICAL Tin (Inorganic) Copper Bismuth Silver SECTION 5 DOT PROPER SHIPPING DOT HAZARD CLASS SHIPPING ID NUMBER. EPA HAZARDOUS WASTE EPA HAZARD WASTE CL SECTION 6 ENTRY ROUTE IN GENERAL Add	TLV (TWA) 2.0 mg/cu m 0.1 mg/cu m (Fume) 1.0 mg/cu m (Dust) No TLV established 0.01 mg/cu m NAME	REGUI PEL 2.0 mg/ 0.1 mg/ 1.0 mg/ N/A 0.01 mg REGULATED EFFECTS - YES SKIN - YES ure to bismuth can	Cu m (cu m (cu m (Fume) (cu m (Dust) g/cu m IDENTIFICATION OF EXPOSURE E EYE - YES cause "bismuth line", b.	STEL N/A N/A N/A N/A N/A N/A N/A SIESTER SIEST	Hazard Action Level
CTION 4 CHEMICAL Tin (Inorganic) Copper Bismuth Silver SECTION 5 DOT PROPER SHIPPING DOT HAZARD CLASS SHIPPING ID NUMBER. EPA HAZARDOUS WASTE EPA HAZARD WASTE CL SECTION 6 ENTRY ROUTE IN GENERAL Ad	TLV (TWA) 2.0 mg/cu m 0.1 mg/cu m (Fume) 1.0 mg/cu m (Dust) No TLV established 0.01 mg/cu m NA NA NA NA NA ID NUMBER. NA ASS. N/A HALE - YES INGEST ditionally, Overexposerexposure to copper	REGUI PEL 2.0 mg/ 0.1 mg/ 1.0 mg/ N/A 0.01 mg REGULATED EFFECTS - YES SKIN - YES ure to bismuth can cause anemia.	Cu m (cu m (Fume) (cu m (Dust) g/cu m IDENTIFICATION OF EXPOSURE S EYE - YES cause "bismuth line", b. Long term overexposure	STEL N/A N/A N/A N/A N/A N/A N/A SIESSIESSIESSIESSIESSIESSIESSIESSIESSIE	Hazard Action Level
CTION 4 CHEMICAL Tin (Inorganic) Copper Bismuth Silver SECTION 5 DOT PROPER SHIPPING DOT HAZARD CLASS SHIPPING ID NUMBER. EPA HAZARDOUS WASTE EPA HAZARD WASTE CL SECTION 6 ENTRY ROUTE IN GENERAL Ad OV INHALATION If	TLV (TWA) 2.0 mg/cu m 0.1 mg/cu m (Fume) 1.0 mg/cu m (Dust) NO TLV established 0.01 mg/cu m NAME	REGUI PEL 2.0 mg/ 0.1 mg/ N/A 0.01 mg/ N/A PEFFECTS PEFFECTS YES SKIN - YES ure to bismuth can cause anemia. Oduce respiratory is	Cu m (cu m (cu m (Fume) (cu m (Dust) g/cu m IDENTIFICATION OF EXPOSURE BYE - YES cause "bismuth line", bi Long term overexposure critation, fever, chills	STEL N/A N/A N/A N/A N/A N/A SIE	foul breath, and salivation ung damage. miting, dizzines, sweating,
CTION 4 CHEMICAL Tin (Inorganic) Copper Bismuth Silver SECTION 5 DOT PROPER SHIPPING DOT HAZARD CLASS SHIPPING ID NUMBER SHIPPING ID NUMBER EPA HAZARDOUS WASTE EPA HAZARD WASTE CL SECTION 6 ENTRY ROUTE IN GENERAL	TLV (TWA) 2.0 mg/cu m 0.1 mg/cu m (Fume) 1.0 mg/cu m (Dust) NO TLV established 0.01 mg/cu m N/A N/A N/A ID NUMBER. N/A ASS. N/A HALE - YES INGEST ditionally, Overexpos erexposure to copper heated, fumes may pr	REGUI PEL 2.0 mg/ 0.1 mg/ 1.0 mg/ N/A 0.01 mg REGULATED EFFECTS - YES SKIN - YES ure to bismuth can cause anemia. oduce respiratory imouth. Overexposit	Cu m (cu m (cu m (Fume) (cu m (Dust) g/cu m IDENTIFICATION OF EXPOSURE BYE - YES cause "bismuth line", bi Long term overexposure critation, fever, chills	STEL N/A N/A N/A N/A N/A N/A SIE	Hazard Action Level
CHEMICAL Tin (Inorganic) Copper Bismuth Silver SECTION 5 DOT PROPER SHIPPING DOT HAZARD CLASS SHIPPING ID NUMBER. EPA HAZARDOUS WASTE EPA HAZARD WASTE CL SECTION 6 ENTRY ROUTE IN GENERAL Ad OV INHALATION If an SKIN FU	TLV (TWA) 2.0 mg/cu m 0.1 mg/cu m (Fume) 1.0 mg/cu m (Dust) No TLV established 0.01 mg/cu m N/A N/A N/A ID NUMBER. N/A ASS. N/A HALE - YES INGEST ditionally, Overexpost erexposure to copper heated, fumes may prid a metallic taste in mes may cause irritat	REGUI PEL 2.0 mg/ 0.1 mg/ 1.0 mg/ N/A 0.01 mg REGULATED EFFECTS - YES SKIN - YES ure to bismuth can can cause anemia. oduce respiratory is mouth. Overexposition.	Cu m (cu m (cu m (Fume) (cu m (Dust) g/cu m IDENTIFICATION OF EXPOSURE BYE - YES cause "bismuth line", bi Long term overexposure critation, fever, chills	STEL N/A N/A N/A N/A N/A N/A SIE	foul breath, and salivation ung damage. miting, dizzines, sweating,
CHEMICAL Tin (Inorganic) Copper Bismuth Silver SECTION 5 DOT PROPER SHIPPING DOT HAZARD CLASS SHIPPING ID NUMBER. EPA HAZARDOUS WASTE EPA HAZARD WASTE CL SECTION 6 ENTRY ROUTE. IN GENERAL. Ad OV INHALATION. If SKIN. FU EYE. FU	TLV (TWA) 2.0 mg/cu m 0.1 mg/cu m (Fume) 1.0 mg/cu m (Dust) No TLV established 0.01 mg/cu m N/A N/A N/A ID NUMBER. N/A ASS	REGUI PEL 2.0 mg/ 0.1 mg/ 1.0 mg/ N/A 0.01 mg REGULATED EFFECTS - YES SKIN - YES ure to bismuth can can cause anemia. oduce respiratory is mouth. Overexposition.	Cu m (cu m (cu m (Fume) (cu m (Dust) g/cu m IDENTIFICATION OF EXPOSURE EYE - YES cause "bismuth line", billing term overexposure irritation, fever, chilling to fumes can cause a	STEL N/A N/A N/A N/A N/A N/A N/A STEL STEL STEL STEL STEL STEL STEL STEL	Hazard Action Level foul breath, and salivation ung damage. miting, dizzines, sweating, called Metal Fume Pever.
CHEMICAL Tin (Inorganic) Copper Bismuth Silver SECTION 5 DOT PROPER SHIPPING DOT HAZARD CLASS SHIPPING ID NUMBER. EPA HAZARDOUS WASTE EPA HAZARD WASTE CL SECTION 6 ENTRY ROUTE. IN GENERAL. Ad OV INHALATION. If SKIN. FU EYE. FU	TLV (TWA) 2.0 mg/cu m 0.1 mg/cu m (Pume) 1.0 mg/cu m (Dust) No TLV established 0.01 mg/cu m NAME	REGUI PEL 2.0 mg/ 0.1 mg/ 1.0 mg/ N/A 0.01 mg REGULATED EFFECTS - YES SKIN - YES ure to bismuth can can cause anemia. oduce respiratory is mouth. Overexposition.	Cu m (cu m (cu m (Fume) (cu m (Dust) g/cu m IDENTIFICATION OF EXPOSURE BYE YES cause "bismuth line", bi Long term overexposure critation, fever, chills	STEL N/A N/A N/A N/A N/A N/A N/A STEL STEL STEL STEL STEL STEL STEL STEL	Hazard Action Level foul breath, and salivation ung damage. miting, dizzines, sweating, called Metal Fume Pever.
CTION 4 CHEMICAL Tin (Inorganic) Copper Bismuth Silver SECTION 5 DOT PROPER SHIPPING DOT HAZARD CLASS SHIPPING ID NUMBER. EPA HAZARDOUS WASTE EPA HAZARD WASTE CL SECTION 6 ENTRY ROUTE IN GENERAL A OV INHALATION If SKIN FU EYE FU INGESTION MA TARGET ORGANS N/	TLV (TWA) 2.0 mg/cu m 0.1 mg/cu m (Fume) 1.0 mg/cu m (Dust) No TLV established 0.01 mg/cu m N/A N/A N/A ID NUMBER. N/A ASS. N/A HALE - YES INGEST ditionally, Overexpost erexposure to copper heated, fumes may price a metablic taste in mes may cause irritat mes may cause irritat y cause abdominal pai A	REGUI PEL 2.0 mg/ 0.1 mg/ 1.0 mg/ N/A 0.01 mg REGULATED EFFECTS - YES SKIN - YES ure to bismuth can can cause anemia. oduce respiratory is mouth. Overexposition. ion. n, nausea, vomiting	Coum (Fume) (cu m (Fume) (cu m (Dust) (g/cu m (Dust	STEL N/A N/A N/A N/A N/A N/A N/A Simplified the state of	foul breath, and salivation ung damage. miting, dizzines, sweating, called Metal Fume Fever.
CHEMICAL Tin (Inorganic) Copper Bismuth Silver SECTION 5 DOT PROPER SHIPPING DOT HAZARD CLASS SHIPPING ID NUMBER. EPA HAZARDOUS WASTE EPA HAZARD WASTE CL SECTION 6 ENTRY ROUTE IN GENERAL Ad OV INHALATION If AND SKIN FU EYE FU INGESTION MA TARGET ORGANS N/	TLV (TWA) 2.0 mg/cu m 0.1 mg/cu m (Fume) 1.0 mg/cu m (Dust) No TLV established 0.01 mg/cu m N/A N/A N/A ID NUMBER. N/A ASS. N/A HALE - YES INGEST ditionally, Overexposterexposure to copper heated, fumes may prid a metallic taste in mes may cause irritat mes may cause irritat y cause abdominal pai A EMERGENCY I	REGUI PEL 2.0 mg/ 0.1 mg/ 1.0 mg/ N/A 0.01 mg REGULATED EFFECTS YES SKIN - YES ure to bismuth can can cause anemia. oduce respiratory is mouth. Overexposition. ion. in, nausea, vomiting	Coum (Fume) (cu m (Fume) (cu m (Dust) (cu m	STEL N/A N/A N/A N/A N/A N/A N/A Since species on gums, to fumes may cause 1 s, muscular pain, vo flu-like condition. Sinitis, internal cu	foul breath, and salivation ung damage. miting, dizzines, sweating, called Metal Fume Fever. ts or obstructions.
CHEMICAL Tin (Inorganic) Copper Bismuth Silver SECTION 5 DOT PROPER SHIPPING DOT HAZARD CLASS SHIPPING ID NUMBER. EPA HAZARDOUS WASTE EPA HAZARD WASTE CL SECTION 6 ENTRY ROUTE. IN GENERAL. Ad OV INHALATION. If SKIN. FU EYE. FU INGESTION MA TARGET ORGANS. N/ SECTION 7 SKIN. If ir	TLV (TWA) 2.0 mg/cu m 0.1 mg/cu m (Fume) 1.0 mg/cu m (Dust) NO TLV established 0.01 mg/cu m N/A N/A N/A ID NUMBER. N/A ASS	REGUI PEL 2.0 mg/ 0.1 mg/ 1.0 mg/ N/A 0.01 mg REGULATED EFFECTS YES SKIN - YES ure to bismuth can can cause anemia. oduce respiratory is mouth. Overexpost ion. ion. n, nausea, vomiting ND FIRST AI thoroughly with sc	Cu m (cu m (cu m (Fume) (cu m (Dust) g/cu m IDENTIFICATION OF EXPOSURE EYE - YES cause "bismuth line", billing term overexposure irritation, fever, chilling term to fumes can cause a g, diarrhea, gastrointest D PROCEDURES - Lap and water. Seek medical	STEL N/A N/A N/A N/A N/A N/A N/A N/	foul breath, and salivation ung damage. miting, dizzines, sweating, called Metal Fume Pever. ts or obstructions.
CHEMICAL Tin (Inorganic) Copper Bismuth Silver SECTION 5 DOT PROPER SHIPPING DOT HAZARD CLASS SHIPPING ID NUMBER. EPA HAZARDOUS WASTE EPA HAZARD WASTE CL SECTION 6 ENTRY ROUTE IN GENERAL Ad OV INHALATION If an SKIN Fu EYE Fu INGESTION Ma TARGET ORGANS N/ SECTION 7 SKIN If ir EYES If fu	TLV (TWA) 2.0 mg/cu m 0.1 mg/cu m (Pume) 1.0 mg/cu m (Dust) No TLV established 0.01 mg/cu m NAME	REGUI PEL 2.0 mg/ 0.1 mg/ 1.0 mg/ N/A 0.01 mg REGULATED EFFECTS - YES SKIN - YES ure to bismuth can can cause anemia. oduce respiratory is mouth. Overexpost ion. ion. n, nausea, vomiting ND FIRST AI thoroughly with so move to fresh air	Cu m (cu m (cu m (Fume) (cu m (Dust) g(cu m IDENTIFICATION DESTRUCTION EXPOSURE EXPE - YES cause 'bismuth line", billing term overexposure circitation, fever, chilling to fumes can cause a g, diarrhea, gastrointes EXPE - YES cause 'bismuth line", billing term overexposure circitation, fever, chilling term over over over over over over over over	STEL N/A N/A N/A N/A N/A N/A N/A N/	foul breath, and salivation ung damage. miting, dizzines, sweating, called Metal Fume Pever. ts or obstructions.
CHEMICAL Tin (Inorganic) Copper Bismuth Silver SECTION 5 DOT PROPER SHIPPING DOT HAZARD CLASS SHIPPING ID NUMBER. EPA HAZARDOUS WASTE EPA HAZARD WASTE CL SECTION 6 ENTRY ROUTE IN GENERAL Ad OV INHALATION If an SKIN. Fu EYE. Fu INGESTION MA TARGET ORGANS. N/ SECTION 7 SKIN If ir EYES If fu persi	TLV (TWA) 2.0 mg/cu m 0.1 mg/cu m (Fume) 1.0 mg/cu m (Dust) No TLV established 0.01 mg/cu m NA NA NA INA INA ID NUMBER N/A ASS N/A HALE - YES INGEST ditionally, Overexposterexposure to copper heated, fumes may profice a metallic taste in may cause irritat mes may cause irritat y cause abdominal pai A EMERGENCY Fritation arrises, wash mes cause irritation, sts, seek medical att	REGUI PEL 2.0 mg/ 0.1 mg/ 1.0 mg/ N/A 0.01 mg/ N/A 0.01 mg/ EFFECTS YES SKIN - YES ure to bismuth can can cause anemia. oduce respiratory i mouth. Overexposition. ion. ion. ion. ion. ion. thoroughly with so move to fresh air ention. If eye is	Cu m (Fume) (cu m (Dust) (cu m	STEL N/A N/A N/A N/A N/A N/A N/A Size = = = = = = = = = = = = = = = = = = =	foul breath, and salivation ung damage. miting, dizzines, sweating, called Metal Fume Fever. ts or obstructions. COLLECT ritation persists. If irritation
CHEMICAL Tin (Inorganic) Copper Bismuth Silver SECTION 5 DOT PROPER SHIPPING DOT HAZARD CLASS SHIPPING ID NUMBER. EPA HAZARDOUS WASTE EPA HAZARD WASTE CL SECTION 6 ENTRY ROUTE IN GENERAL Ad OV INHALATION If an SKIN Fu EYE Fu INGESTION MA TARGET ORGANS N/ SECTION 7 SKIN If ir EYES If fu persi INHALATION Move	TLV (TWA) 2.0 mg/cu m 0.1 mg/cu m (Fume) 1.0 mg/cu m (Dust) No TLV established 0.01 mg/cu m N/A N/A N/A ID NUMBER N/A ASS N/A HALE - YES INGEST ditionally, Overexpost erexposure to copper heated, fumes may pr dia metallic taste in mes may cause irritat mes may cause irritat y cause abdominal pai A EMERGENCY F ritation arrises, wash mes cause irritation, sts, seek medical att to fresh air. If bre	REGUI PEL 2.0 mg/ 0.1 mg/ 1.0 mg/ N/A 0.01 mg/ N/A 0.01 mg/ REGULATED EFFECTS - YES SKIN - YES ure to bismuth can can cause anemia. oduce respiratory is mouth. Overexposition. ion. ion. in, nausea, vomiting ND FIRST AI thoroughly with so move to fresh air ention. If eye is athing is difficult	Cu m (cu m (cu m (Fume) (cu m (Dust) g/cu m IDENTIFICATION SET YES cause "bismuth line", billing term overexposure irritation, fever, chilling to fumes can cause a D PROCEDURES — ap and water. Seek medication of the condition of the conditi	STEL N/A N/A N/A N/A N/A N/A N/A N/	foul breath, and salivation ung damage. miting, dizzines, sweating, called Metal Fume Fever. ts or obstructions. COLLECT ritation persists. If irritation
CHEMICAL Tin (Inorganic) Copper Bismuth Silver SECTION 5 DOT PROPER SHIPPING DOT HAZARD CLASS SHIPPING ID NUMBER. EPA HAZARDOUS WASTE EPA HAZARD WASTE CL SECTION 6 ENTRY ROUTE IN GENERAL Ad OV INHALATION If an SKIN FU EYE. FU INGESTION MA TARGET ORGANS. N/ SECTION 7 SKIN If ir EYES If fu persi INHALATION Move Keep	TLV (TWA) 2.0 mg/cu m 0.1 mg/cu m (Fume) 1.0 mg/cu m (Dust) NO TLV established 0.01 mg/cu m N/A N/A N/A ID NUMBER N/A ASS N/A HALE - YES INGEST ditionally, Overexposterexposure to copper heated, fumes may price a metablic taste in mes may cause irritat mes may cause irritat y cause abdominal pai A EMERGENCY F ritation arises, wash mes cause irritation, sts, seek medical att to fresh air. If bre victim quiet and warm	REGUI PEL 2.0 mg/ 0.1 mg/ 1.0 mg/ N/A 0.01 mg N/A 0.01 mg REGULATED EFFECTS - YES SKIN - YES ure to bismuth can can cause anemia. oduce respiratory is mouth. Overexposition. ion. ion. ion, nausea, vomiting ND FIRST AI thoroughly with so move to fresh air ention. If eye is athing is difficult. Call a poison co	Cu m (cu m (cu m (Fume) (cu m (Dust) g/cu m IDENTIFICATION OF EXPOSURE BYE YES cause "bismuth line", billing term overexposure circitation, fever, chilling to fumes can cause a g, diarrhea, gastrointest can diarrigate eyes with the struck with wire, seek and irrigate eyes with the struck with wire, seek in give oxygen. If not introl center or physicia	STEL N/A N/A N/A N/A N/A N/A N/A N/	foul breath, and salivation ung damage. miting, dizzines, sweating, called Metal Fume Pever. ts or obstructions. 6 COLLECT ritation persists. If irritation ficial respiration.
CHEMICAL Tin (Inorganic) Copper Bismuth Silver SECTION 5 DOT PROPER SHIPPING DOT HAZARD CLASS SHIPPING ID NUMBER. EPA HAZARDOUS WASTE EPA HAZARD WASTE CL SECTION 6 ENTRY ROUTE IN GENERAL Ad OV INHALATION If AND SKIN FU EYE. FU INGESTION MA TARGET ORGANS. N/ SECTION 7 SKIN If ir EYES If fu persi INHALATION MOVE Keep INGESTION Drink	TLV (TWA) 2.0 mg/cu m 0.1 mg/cu m (Fume) 1.0 mg/cu m (Dust) No TLV established 0.01 mg/cu m NA NA NA ID NUMBER. N/A ASS. N/A HALE - YES INGEST ditionally, Overexposerexposure to copper heated, fumes may provide mes may cause irritate mes may cause irritate y cause abdominal pair EMERGENCY F ritation arises, wash mes cause irritation, seek medical attofresh air. If bre victim quiet and warm water and call a poi	REGUI PEL 2.0 mg/ 0.1 mg/ 1.0 mg/ N/A 0.01 mg REGULATED EFFECTS YES SKIN - YES ure to bismuth can can cause anemia. oduce respiratory is mouth. Overexposition. ion. n, nausea, vomiting ND FIRST AI thoroughly with so move to fresh air ention. If eye is athing is difficult call a poison co son control center	Cu m (cu m (cu m (Fume) (cu m (Dust) g/cu m IDENTIFICATION SET YES cause "bismuth line", billing term overexposure irritation, fever, chilling to fumes can cause a D PROCEDURES — ap and water. Seek medication of the condition of the conditi	STEL N/A N/A N/A N/A N/A N/A N/A N/	foul breath, and salivation ung damage. miting, dizzines, sweating, called Metal Fume Pever. ts or obstructions. 6 COLLECT ritation persists. If irritation ficial respiration.
CHEMICAL Tin (Inorganic) Copper Bismuth Silver SECTION 5 DOT PROPER SHIPPING DOT HAZARD CLASS SHIPPING ID NUMBER. EPA HAZARDOUS WASTE EPA HAZARD WASTE CL SECTION 6 ENTRY ROUTE IN GENERAL Ad OV INHALATION If AND SKIN FU EYE. FU INGESTION MA TARGET ORGANS. N/ SECTION 7 SKIN If ir EYES If fu persi INHALATION MOVE Keep INGESTION Drink	TLV (TWA) 2.0 mg/cu m 0.1 mg/cu m (Fume) 1.0 mg/cu m (Dust) NO TLV established 0.01 mg/cu m N/A N/A N/A ID NUMBER N/A ASS N/A HALE - YES INGEST ditionally, Overexposterexposure to copper heated, fumes may price a metablic taste in mes may cause irritat mes may cause irritat y cause abdominal pai A EMERGENCY F ritation arises, wash mes cause irritation, sts, seek medical att to fresh air. If bre victim quiet and warm	REGUI PEL 2.0 mg/ 0.1 mg/ 1.0 mg/ N/A 0.01 mg REGULATED EFFECTS YES SKIN - YES ure to bismuth can can cause anemia. oduce respiratory is mouth. Overexposition. ion. n, nausea, vomiting ND FIRST AI thoroughly with so move to fresh air ention. If eye is athing is difficult call a poison co son control center	Cu m (cu m (cu m (Fume) (cu m (Dust) g/cu m IDENTIFICATION OF EXPOSURE BYE YES cause "bismuth line", billing term overexposure circitation, fever, chilling to fumes can cause a g, diarrhea, gastrointest can diarrigate eyes with the struck with wire, seek and irrigate eyes with the struck with wire, seek in give oxygen. If not introl center or physicia	STEL N/A N/A N/A N/A N/A N/A N/A N/	foul breath, and salivation ung damage. miting, dizzines, sweating, called Metal Fume Pever. ts or obstructions. 6 COLLECT ritation persists. If irritation ficial respiration.

(Continued on next page)

SAFE-FLO SILVER LEAD-FREE SOLDER

________ SECTION 8 PHYSICAL AND CHEMICAL PROPERTIES NFPA HAZARD SIGNAL..... HEALTH - 0 FLAMMABILITY - 0 STABILITY - 0 SPECIAL - NONE BOILING POINT..... N/A MELTING POINT..... 420 - 460 Degrees F VAPOR PRESSURE..... N/A VAPOR DENSITY (AIR = 1) ... N/A VOLATILE COMPONENTS..... N/A SOLUBILITY IN WATER..... Insoluble PH..... N/A SPECIFIC GRAVITY..... 9 - 11 EVAPORATION RATE..... N/A APPEARANCE..... Silver-Gray Wire Metal ODOR..... None WILL DISSOLVE IN N/A MATERIAL IS..... Solid SECTION 9 FIRE AND EXPLOSION HAZARD DATA FLAMMABILITY..... LEL = N/A UEL = N/A FLASHPOINT AND METHOD USED...... N/A CONDITIONS TO AVOID: Do not heat over 486 Degrees F. HAZARDOUS DECOMPOSITION STABILITY..... Stable PRODUCTS: If overheated, oxides of tin, bismuth, copper and silver. HAZARDOUS POLYMERIZATION..... Will not occur. CONDITIONS TO AVOID: None INCOMPATIBILITY/MAT. TO AVOID.... None SPECIAL FIRE FIGHTING PROCEDURE... None _______________________________ SECTION 10 SPILL AND DISPOSAL INFORMATION SPILL OR LEAK PROCEDURES... Place material in a closed container. WASTE DISPOSAL..... According to local, state and federal regulations. SAFE USAGE DATA SECTION 11 PROTECTIVE EQUIPMENT TYPES... EYES: Safety glasses with side shields. RESPIRATORY: NIOSH-approved respirator for toxic dust/fumes. GLOVES: Rubber OTHER: None and windows to remove fumes. _______ SECTION 12 MANUFACTURER OR SUPPLIER DATA FIRM NAME & MAILING ADDRESS... OATEY CO., 4700 West 160th Street, P.O. Box 35986, Cleveland, Ohio 44135

OATEY PHONE NUMBER...... (216) 267-7100 EMERGENCY PHONE NUMBER: (303) 623-5716 COLLECT

SECTION 13 DISCLAIMER

The information herein has been compiled from sources believed to be reliable, up-to-date, and is accurate to the best of our knowledge. However, Oatey cannot give any guarantees regarding information from other sources, and expressly does not make warranties, nor assumes any liability for its use.