

DATE PREPARED 11/25/85

U.S. DEPARTMENT OF LABOR  
Occupational Safety and Health Administration

Form Approved  
OMB No. 44-R1387

# MATERIAL SAFETY DATA SHEET

## SECTION I

MANUFACTURER'S NAME THERMACOTE - WELCO COMPANY		EMERGENCY TELEPHONE NO. 704-739-6421
ADDRESS (Number, Street, City, State, and ZIP Code) HWY. 161 YORK ROAD POB 112 KINGS MOUNTAIN NORTH CAROLINA 28086		
CHEMICAL NAME AND SYNONYMS N.A.		TRADE NAME AND SYNONYMS WELCO 501CD
CHEMICAL FAMILY Alloy of Silver, Copper, Cadmium, Zinc		FORMULA

## SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			Ag - CAS #7440-22-4 (2, 4)	50	.01 Mg/M <sup>3</sup> as Ag
CATALYST			Cu - " #7440-50-8 (2, 4)	15.5	.1 Mg/M <sup>3</sup> as Cu
VEHICLE			Cd - " #7440-43-9 (1, 2, 3, 4, 7) C	18	.05 Mg/M <sup>3</sup> as Cd
SOLVENTS			Zn - " #7440-66-6 (5)	16.5	5 Mg/M <sup>3</sup> as Zn Oxide Fume
ADDITIVES					
OTHERS					
HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES				%	TLV (Units)

## SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	Liquidus Solidus	1175°F 1160°F	SPECIFIC GRAVITY (H <sub>2</sub> O = 1)	9.49
VAPOR PRESSURE (mm Hg.)		N.A.	PERCENT VOLATILE BY VOLUME (%)	N.A.
VAPOR DENSITY (AIR = 1)		N.A.	EVAPORATING RATE (_____ = 1)	N.A.
SOLUBILITY IN WATER		Negligible		
APPEARANCE AND ODOR				

## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	FLAMMABLE LIMITS	Lel	Uel
EXTINGUISHING MEDIA			
SPECIAL FIRE FIGHTING PROCEDURES At high temperatures this alloy could melt and continuous heating could produce metal vapor.			
UNUSUAL FIRE AND EXPLOSION HAZARDS			

(Continued on reverse side)

### SECTION V - HEALTH HAZARD DATA

**THRESHOLD LIMIT VALUE**  
See Section II

**EFFECTS OF OVEREXPOSURE**

Cadmium poisoning - Ingestion and inhalation will cause vomiting, diarrhea, headache, dizziness, fever, chest pain and breathlessness.

**EMERGENCY AND FIRST AID PROCEDURES**

Keep patient warm and obtain immediate medical attention.

### SECTION VI - REACTIVITY DATA

<b>STABILITY</b>	<b>UNSTABLE</b>		<b>CONDITIONS TO AVOID</b>
	<b>STABLE</b>	X	
<b>INCOMPATIBILITY (Materials to avoid)</b> N.A.			
<b>HAZARDOUS DECOMPOSITION PRODUCTS</b> Cadmium vapors while brazing			
<b>HAZARDOUS POLYMERIZATION</b>	<b>MAY OCCUR</b>		<b>CONDITIONS TO AVOID</b> Avoid overheating while brazing to
	<b>WILL NOT OCCUR</b>		minimize cadmium vaporization.

### SECTION VII - SPILL OR LEAK PROCEDURES

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED**  
No hazards from spills.

**WASTE DISPOSAL METHOD**

Has reclaim value as scrap due to silver and copper content.

### SECTION VIII - SPECIAL PROTECTION INFORMATION

**RESPIRATORY PROTECTION (Specify type)**

In confined space use air supplied respirator.

<b>VENTILATION</b>	<b>LOCAL EXHAUST</b> X	<b>SPECIAL</b> N.A.
	<b>MECHANICAL (General)</b> X	<b>OTHER</b>
<b>PROTECTIVE GLOVES</b>		<b>EYE PROTECTION</b> X
<b>OTHER PROTECTIVE EQUIPMENT</b> Provide good ventilation and avoid overheating while brazing.		

### SECTION IX - SPECIAL PRECAUTIONS

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING** N.A.

**OTHER PRECAUTIONS**