

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

Form Approved  
OMB No. 44-R1387

# MATERIAL SAFETY DATA SHEET

Required under USDL Safety and Health Regulations for Ship Repairing,  
Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

## SECTION I

MANUFACTURER'S NAME <b>THERMACOTE WELCO</b>		EMERGENCY TELEPHONE NO. <b>704-739-6421</b>
ADDRESS (Number, Street, City, State, and ZIP Code) <b>HWY 161 YORK RD., KINGS MOUNTAIN, N.C. 28086</b>		
CHEMICAL NAME AND SYNONYMS	TRADE NAME AND SYNONYMS <b>602</b>	
CHEMICAL FAMILY <b>Alloy of Silver, Copper &amp; Phosphorus</b>	FORMULA	

## SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					
HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES				%	TLV (Units)

## SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	N/A	SPECIFIC GRAVITY (H <sub>2</sub> O=1)	7.67
VAPOR PRESSURE (mm Hg.)	N/A	PERCENT VOLATILE BY VOLUME (%)	N/A
VAPOR DENSITY (AIR=1)	N/A	EVAPORATION 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			
UNUSUAL FIRE AND EXPLOSION HAZARDS			

### SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

Phosphorus Oxide Vapors

EFFECTS OF OVEREXPOSURE

Irritating to nose, throat and lungs, skin & mucous membranes.

EMERGENCY AND FIRST AID PROCEDURES

Flush irritated parts with water & get medical attention.

### SECTION VI - REACTIVITY DATA

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

### SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

N/A

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WASTE DISPOSAL METHOD

N/A

### SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)

In confined space, use air supplied respirator.

VENTILATION	LOCAL EXHAUST	SPECIAL
	X	N/A
	MECHANICAL (General)	OTHER
	X	
PROTECTIVE GLOVES		EYE PROTECTION
X		X
OTHER PROTECTIVE EQUIPMENT		
Provide good ventilation & Avoid overheating while brazing.		

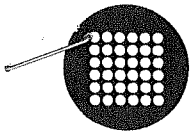
### SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

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OTHER PRECAUTIONS

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# MATERIAL SAFETY DATA SHEET

EFFECTIVE DATE: July 1, 1985

THERMACOTE WELCO

HIGHWAY 161, YORK ROAD,  
KINGS MOUNTAIN, N.C. 28086

## I. IDENTIFICATION

PRODUCT NAME: 700 Flux (345)

CHEMICAL NAME: N/A  
AND SYNONYMS: N/A  
CAS NAME: N/A  
CAS #: N/A

DEPARTMENT OF TRANSPORTATION  
HAZARD CLASSIFICATION  
None  
SHIPPING NAME  
N/A

## II. HAZARDOUS INGREDIENTS

MATERIAL: CAS NAME	CAS#	TLV	HAZARD
Zinc chloride fumes	7646-85-7	1 mg/m <sup>3</sup>	ACGIH
Total fluoride as F	---	2.5 mg/m <sup>3</sup>	ACGIH as fumes

Remaining ingredients are proprietary and are classified as NON-HAZARDOUS

## III. PHYSICAL DATA

BOILING POINT 760 mm Hg °F	N/A	FREEZING POINT	N/A
SPECIFIC GRAVITY (H <sub>2</sub> O = 1) @ 72°F	2.15	VAPOR PRESSURE at 20°C mmHg	N/A
VAPOR DENSITY (air = 1)	N/A	SOLUBILITY IN WATER	Slight
PERCENT VOLATILES BY VOLUME	N/A	EVAPORATION RATE (Butyl Acetate = 1)	N/A
APPEARANCE AND ODOR	White powder with no characteristic odor.		

While we believe all information presented herein is accurate and reliable, the data are not to be taken as a guarantee or representation of any kind for which THERMACOTE assumes legal responsibility. They are offered solely for your consideration, investigation and verification.

EMERGENCY PHONE NUMBER; 704-739-6421

#### IV. HEALTH HAZARD DATA

##### TLV AND SOURCE REFERENCES

7.268 mg/m<sup>3</sup> per TLVs for mixture in ACGIH

##### EFFECTS OF ACUTE OVEREXPOSURE

SWALLOWING	Can cause chemical burn to digestive system.
SKIN ABSORPTION	Not known as a skin absorbent.
INHALATION	Irritation to respiratory system.
SKIN CONTACT	Dermatitis, possibly a chemical burn.
EYE CONTACT	Irritation to eyes, and possible burn of eye surfaces.

##### EMERGENCY AND FIRST AID PROCEDURES:

SWALLOWING	Contains zinc chloride and a salt of lithium. Immediately call a physician, and advise.
SKIN	Promptly flush with water. If rash develops, call a physician.
INHALATION	Remove to fresh air.
EYES	Flush with water at least 15 minutes. Get medical attention.

#### V. SPECIAL PROTECTION INFORMATION

##### RESPIRATORY PROTECTION

If the work station is not properly ventilated, use a NIOSH approved mask.

##### VENTILATION

Maintain air flow away from user, so that the TLV is never exceeded.

##### PROTECTIVE GLOVES

See below

##### EYE PROTECTION

Chemical safety glasses

##### OTHER PROTECTIVE EQUIPMENT

Regular protection equipment as normally used in braze/welding operation.