

DATE PREPARED 11/25/86

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

Form Approved
OSHA No. 44-R-1387

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 THERMACOTE-WELCO COMPANY		EMERGENCY TELEPHONE NO. 704-739-6421
ADDRESS York Road, Hwy. 161 P.O. Box 112 King's Mountain, NC 28086		
CHEMICAL NAME AND SYNONYMS		TRADE NAME AND SYNONYMS WELCO 17 FLUX
CHEMICAL FAMILY	FORMULA	

IMPORTANT! This section covers the materials from which this product is manufactured. The fumes and gases produced during welding with normal use of this product are covered in Section V.

Material (CAS No.)	Weight%	Exposure Limit 1984/85 TLV-TWA (OSHA PEL)
Total boron as B ₂ O ₃		10 mg/m ³ ACGIH as fumes

*The term "hazardous" should be interpreted as a term required and defined in the OSHA Hazard Communications Standard (29CFR 1910.1200) and does not necessarily imply the existence of any hazard.

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	212	SPECIFIC GRAVITY (H ₂ O=1)	1.32
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	Moderate		
APPEARANCE AND ODOR	Smooth green paste with no characteristic odor.		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	N/A	FLAMMABLE LIMITS	N/A	LoL	UoL
EXTINGUISHING MEDIA	None. Product is an inherent fire retardant.				
SPECIAL FIRE FIGHTING PROCEDURES	None.				
UNUSUAL FIRE AND EXPLOSION HAZARDS	None.				

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE	26.83 mg/m ³ per TLVs for mixtures in ACGIH
EFFECTS OF OVEREXPOSURE	
SWALLOWING	Nausea, vomiting, and diarrhea.
SKIN ABSORPTION	Boron is not absorbed through intact skin.
INHALATION	Irritation to respiratory system.
SKIN CONTACT	Possible dermatitis.
EYE CONTACT	Irritation to eye surfaces.
EMERGENCY AND FIRST AID PROCEDURES	
SWALLOWING	If conscious induce vomiting. Call a physician, advise of above.
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.

SECTION VI - REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID	NONE
	STABLE	XXX		
INCOMPATIBILITY (Materials to avoid)				
NONE				
HAZARDOUS DECOMPOSITION PRODUCTS				
NONE				
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID	
	WILL NOT OCCUR	XXX	NONE	

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED	Contain spill, absorb, sweep-up, dispose. Flush area with water to chemical sewer. Avoid breathing dust.
WASTE DISPOSAL METHOD	Dispose of in accordance with all federal, state and local regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)		If the work station is not properly ventilated, use a NIOSH approved mask.
VENTILATION	LOCAL EXHAUST	SPECIAL
	MECHANICAL (General)	OTHER
Maintain air flow away from user, so that the TLV is never exceeded.		
PROTECTIVE GLOVES	SEE BELOW	EYE PROTECTION
OTHER PROTECTIVE EQUIPMENT		
Regular protective equipment as is normally used in braze/welding operations.		

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING	Wash hands thoroughly after handling. Store flux under ambient conditions.
OTHER PRECAUTIONS	Remove and wash contaminated clothing before re-use.