



# MATERIAL SAFETY DATA SHEET



EFFECTIVE DATE: July 1, 1985

THERMAGOTE WELCO

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

## I. IDENTIFICATION

PRODUCT NAME: 505 FLUX (228)

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

DEPARTMENT OF TRANSPORTATION  
HAZARD CLASSIFICATION  
Corrosive material  
SHIPPING NAME  
Corrosive liquid, N.O.S.

## II. HAZARDOUS INGREDIENTS

MATERIAL: CAS NAME	CAS#	TLV	HAZARD
Zinc chloride fumes	7646-85-7	1 mg/m <sup>3</sup>	ACGIH
Ammonium chloride	12125-02-9	10 mg/m <sup>3</sup>	ACGIH as fumes
Ethanolamine	141-43-5	8 mg/m <sup>3</sup>	Corrosive
Hydrogen chloride	7647-01-0	7 mg/m <sup>3</sup>	Corrosive

Remaining ingredients are proprietary and are classified as NON-HAZARDOUS

## III. PHYSICAL DATA

BOILING POINT 760 mm Hg °F	215	FREEZING POINT	N/A
SPECIFIC GRAVITY (H <sub>2</sub> O = 1) @ 72°F	1.387	VAPOR PRESSURE at 20°C mmHg	5.24
VAPOR DENSITY (air = 1)	0.54	SOLUBILITY IN WATER	Appreciable
PERCENT VOLATILES BY VOLUME	24	EVAPORATION RATE (Butyl Acetate = 1)	<1
APPEARANCE AND ODOR	Pale clear yellow liquid 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 Force Chemicals 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

2.83 mg/m<sup>3</sup> per TLVs for mixtures in ACGIH

##### EFFECTS OF ACUTE OVEREXPOSURE

SWALLOWING	Chemical burn to digestive system.
SKIN ABSORPTION	Not classified as a skin absorbent.
INHALATION	Irritant to respiratory system.
SKIN CONTACT	Possible dermatitis, possible chemical burn.
EYE CONTACT	Irritation to eyes, possible burn of eye surfaces.

##### EMERGENCY AND FIRST AID PROCEDURES:

SWALLOWING	Do not induce vomiting. Call a physician. If conscious give milk or water to dilute.
SKIN	Wash skin thoroughly with soap and water. If rash develops, call a physician.
INHALATION	Remove to fresh air.
EYES	Flush with water for 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 normally used in a soldering operation.

## VI. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT TCC °F	N/A			
FLAMMABLE LIMITS IN AIR, % by volume	LOWER	N/A	UPPER	N/A
EXTINGUISHING MEDIA	Water fog, foam, or CO <sub>2</sub>			
SPECIAL FIRE FIGHTING PROCEDURES	None			
UNUSUAL FIRE AND EXPLOSION HAZARDS	May release toxic metal halide fumes, use approved apparatus.			

## VII. REACTIVITY DATA

STABILITY		CONDITIONS TO AVOID	None
UNSTABLE	STABLE		
	XXX		
INCOMPATIBILITY (materials to avoid)		None	
HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS		Hydrogen chloride, zinc oxide	
HAZARDOUS POLYMERIZATION		CONDITIONS TO AVOID	None
May Occur	Will Not Occur		
	XXX		

## VIII. SPILL OR LEAK PROCEDURES

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

## IX. SPECIAL PRECAUTIONS

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