

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 THERMACOTE (WFLCO)	EMERGENCY TELEPHONE NO. 704-739-6421
ADDRESS (Number, Street, City, State, and ZIP Code) HWY 151 YORK RD. KINGS MOUNTAIN, N.C. 28036	
CHEMICAL NAME AND SYNONYMS MILD STEEL ELECTRODE AC-DC	TRADE NAME AND SYNONYMS SPOT ARC 315
CHEMICAL FAMILY	FORMULA

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)		%	TLV (Units)
PIGMENTS		*	Core Wire: C1010 Steel	50	--
CATALYST		*	Manganese	3	5
VEHICLE		*	Titanium	2	10
SOLVENTS		*	Powdered Iron	25	10
ADDITIVES		*	Sodium or Potassium Silicate	1-6	10
OTHERS					
HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES				%	TLV (Units)
Cotton Floc				1	
* CAS NUMBERS NOT REGISTERED					

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)		SPECIFIC GRAVITY (H ₂ O=1)	
VAPOR PRESSURE (mm Hg.)		PERCENT, VOLATILE BY VOLUME (%)	
VAPOR DENSITY (AIR=1)		EVAPORATION RATE (_____ =1)	
SOLUBILITY IN WATER			
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	
EFFECTS OF OVEREXPOSURE	Faintness, possible nausea
EMERGENCY AND FIRST AID PROCEDURES	Move to fresh air, call physician

SECTION VI - REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	
INCOMPATIBILITY <i>(Materials to avoid)</i>			
HAZARDOUS DECOMPOSITION PRODUCTS CO ₂ , CO, Ozone			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR		Not Applicable

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED	Not Applicable
WASTE DISPOSAL METHOD	

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION <i>(Specify type)</i> Weld fume respirator or air line respirator for confined space or where exposures are above TLV		
VENTILATION	LOCAL EXHAUST In confined or poorly ventilated space	SPECIAL
	MECHANICAL <i>(General)</i> In semi-open or poorly naturally ventilated space	OTHER
PROTECTIVE GLOVES Welder's protective gloves	EYE PROTECTION Face Shield, safety glasses	
OTHER PROTECTIVE EQUIPMENT Welder's protective clothing to protect against sparks, hot material		

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING	
OTHER PRECAUTIONS Arc and sparks could be source of ignition of combustible products	

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SECTION I

MANUFACTURER'S NAME THERMACOTE-WELCO COMPANY		EMERGENCY TELEPHONE NO. 704-739-6421
ADDRESS HWY. 161 YORK ROAD P.O. BOX 112 KINGS MOUNTAIN NORTH CAROLINA 28086		
CHEMICAL NAME AND SYNONYMS		TRADE NAME AND SYNONYMS WELCO 360
CHEMICAL FAMILY	FORMULA	

HAZARDOUS INGREDIENTS/Identity Information

*IMPORTANT: This Section covers materials from which this product is manufactured.

Ingredients of The Product	CAS No.	OSHA PEL Mg/M3	ACGIH TLV Mg/M3	Carcinogenicity
Iron	7439-89-6	5	10 (as Fe ₂ O ₃)	No
Manganese	7439-96-5	5	1	No
Silicon	7440-21-3	5 (as SiO ₂)	3 (as SiO ₂)	No
Titanium Dioxide	13463-67-7	15	10	No
Cellulose	9004-34-6	Not Registered	10	No
Calcium Carbonate	1317-65-3	5 (as CaO)	10	No
Silicon Dioxide	7631-86-9	5	3	No
Potassium Titanate	12030-97-6	Not Registered	10	No
Sodium Titanate	12034-34-3	Not Registered	10	No
Feldspar	68476-25-5	Not Registered	2	No
Iron Oxide	1309-38-2	5	10 (as Fe ₂ O ₃)	No
Graphite	7782-42-5	Not Registered	5	No
Aluminum Oxide	1344-28-1	5	10	No
Potassium Silicate	1312-76-1	Not Registered	5	No
Sodium Silicate	1344-09-8	Not Registered	5	No

SECTION III PHYSICAL DATA NOT APPLICABLE

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Welding arc and sparks can ignite combustibles and flammables. Refer to American National Standard Z49.1 for fire prevention during the use of welding and allied procedures.

SECTION V HEALTH HAZARD DATA

"Electric arc-welding may create one or more of the following health hazards: Fumes and gases can be dangerous to your health. Arc Rays can injure eyes and burn skin. Electric Shock can kill.

EFFECTS OF OVEREXPOSURE: "Short-term overexposure to welding fumes may result in discomfort such as: dizziness, nausea, or dryness or irritation of nose, throat, or eyes, tightness in chest, fever and allergic reactions, (see Sections 4 and 7)." "Long-term (chronic) overexposure to welding fumes may lead to siderosis (iron deposit in lungs) and is believed by some investigators to affect pulmonary function.

EMERGENCY & FIRST AID PROCEDURES: Remove to fresh air, obtain medical attention. Employ first aid techniques recommended by the American Red Cross.