

MATERIAL SAFETY DATA SHEET

THOMAS & BETTS CORPORATION, 8155 T&B BOULEVARD, MEMPHIS, TENNESSEE 38125

T&B CATALOG NO: SEE SECTION 11 OTHER INFORMATION
FOR A COMPLETE LIST OF T&B CATALOG NUMBERS

PAGE: 1 OF 7

PRODUCT DESCRIPTION: FURSEWELD® WELDING MATERIAL

REVISION: 3

DATE PREPARED: January 7, 2011

DOCUMENT NUMBER: MSDS-0132

SECTION 1 PRODUCT IDENTIFICATION & EMERGENCY INFORMATION

PRODUCT NAME: FURSEWELD® WELDING MATERIAL
GENERAL USE: TO JOIN TWO OR MORE CABLES, GROUND RODS OR REBAR
PRODUCT DESCRIPTION: WELDING MATERIAL
GENERIC INGREDIENT: COPPER OXIDE GRANULES AND ALUMINUM/COPPER ALLOY

24 HOUR EMERGENCY TELEPHONE NUMBERS: CHEMTREC (703) 527-3887 / (800) 424-9300
FOR PRODUCT INFORMATION: CALL THOMAS & BETTS; (901) 252-5000 ext. 8324

SECTION 2 HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENTS	OSHA HAZARDOUS INGREDIENTS						
	CAS #	% BY WT	ACGIH TLV	ACGIH TLV-C	ACGIH STEL	OSHA PEL	OTHER LIMITS OF EXPOSURE
COPPER OXIDE	1317-39-1	NOT > 85%	1.0 DUST 0.2 FUME	N/A	N/A	1.0 DUST 0.1 FUME	N/A
ALUMINUM / COPPER ALLOY	7429-90-5	NOT > 60% ALUMINUM	10.0 DUST 5.0 FUME	N/A	N/A	15.0 TOTAL DUST 5.0 RESPIRABLE FRACTION	N/A
	7440-50-8	NOT > 5% COPPER	1.0 DUST 0.2 FUME	N/A	N/A	1.0 DUST 0.1 FUME	N/A
SILICATE	1344-95-2	NOT > 5%	10.0 DUST	N/A	N/A	15.0 TOTAL DUST 5.0 RESPIRABLE FRACTION	N/A
SILICON	7440-21-3	NOT > 5%	10.0 DUST	N/A	N/A	15.0 TOTAL DUST 5.0 RESPIRABLE FRACTION	N/A
FLUORIDE (AS F)	VARIES	TRACE	2.5 AS FLUORIDE	N/A	N/A	2.5 AS FLUORIDE	N/A

ADDITIONAL COMPONENT INFORMATION: ALL VALUES REFER TO 8-HOUR TIME WEIGHTED AVERAGE CONCENTRATION AND UNITS ARE mg/m³

SECTION 3 HEALTH INFORMATION & PROTECTION

CARCINOGENICITY

NTP? NONE LISTED
IARC MONOGRAPHS? NO EVALUATION
OSHA REGULATED? NOT REGULATED

ROUTES OF ENTRY

EYES? N/A
INGESTION? N/A

MATERIAL SAFETY DATA SHEET

THOMAS & BETTS CORPORATION, 8155 T&B BOULEVARD, MEMPHIS, TENNESSEE 38125

T&B CATALOG NO: SEE SECTION 11 OTHER INFORMATION
FOR A COMPLETE LIST OF T&B CATALOG NUMBERS

PAGE: 2 OF 7

PRODUCT DESCRIPTION: FURSEWELD® WELDING MATERIAL

REVISION: 3

DATE PREPARED: January 7, 2011

DOCUMENT NUMBER: MSDS-0132

INHALATION? YES
SKIN? N/A

EMERGENCY OVERVIEW

NONE KNOWN

HEALTH HAZARDS

ACUTE: BURNS FROM CONTACT WITH REACTION OR REACTION PRODUCTS, OR FROM HOT EQUIPMENT. DUST AND FUMES ARE IRRITANT TO EYES AND UPPER RESPIRATORY TRACT. INHALATION OF HIGH CONCENTRATIONS OF FRESHLY FORMED OXIDE FUMES AND DUSTS IN THE RESPIRABLE PARTICLE SIZE RANGE CAN CAUSE INFLUENZA-LIKE ILLNESS TERMED METAL FUME FEVER. DIRECT EYE CONTACT WITH "FLASH" OF LIGHT FROM REACTION CAN RESULT IN TEMPORARY BLINDNESS.

CHRONIC: PROLONGED INHALATION OF COPPER OXIDE DUST MAY CAUSE ULCERATION AND PERFORATION OF THE NASAL SEPTUM. LONG TERM EXPOSURE TO COPPER DUST MAY CAUSE ALLERGIC DERMATITIS.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: MAY CAUSE IRRITATION

INGESTION: MAY CAUSE DIARRHEA

INHALATION: MAY BLOCK BREATHING PASSAGES IF INHALED

SKIN: MAY CAUSE IRRITATION

POTENTIAL HEALTH EFFECTS

EYES CONTACT: MAY CAUSE IRRITATION

INGESTION: MAY CAUSE DIARRHEA

INHALATION: MAY BLOCK BREATHING PASSAGES IF INHALED

SKIN CONTACT: MAY IRRITATE THE SKIN AFTER PROLONGED PERIODS OF CONTACT

FIRST AID MEASURES

STANDARD TREATMENT FOR BURNS IN EVENT OF CONTACT WITH MOLTEN METAL SLAG, OR HOT EQUIPMENT. FOR INHALATION OF DUST, REMOVE FROM EXPOSURE, PROVIDE FRESH AIR, FLUSH EYES WITH WATER, AND CONSULT A PHYSICIAN.

EYES CONTACT: REMOVE ANY CONTACT LENS AND RINSE THE AFFECTED EYE IMMEDIATELY WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES OR UNTIL ALL RESIDUAL MATERIAL IS DISLODGED OR GONE. IF IRRITATION OR REDNESS PERSISTS, SEEK MEDICAL ATTENTION.

INGESTION: DRINK PLENTY OF WATER, DO NOT INDUCE VOMITING, AND SEEK MEDICAL ATTENTION.

INHALATION: REMOVE FROM AREA TO FRESH AIR. IF SYMPTOMATIC, SEEK MEDICAL ATTENTION.

SKIN CONTACT: WASH EXPOSED SKIN AREAS WITH SOAP AND WATER. IF IRRITATION PERSISTS, SEEK MEDICAL ATTENTION.

MEDICAL CONDITION GENERALLY AGGRAVATED BY EXPOSURE

MATERIAL SAFETY DATA SHEET

THOMAS & BETTS CORPORATION, 8155 T&B BOULEVARD, MEMPHIS, TENNESSEE 38125

T&B CATALOG NO: SEE SECTION 11 OTHER INFORMATION
FOR A COMPLETE LIST OF T&B CATALOG NUMBERS

PAGE: 3 OF 7

PRODUCT DESCRIPTION: FURSEWELD® WELDING MATERIAL

REVISION: 3

DATE PREPARED: January 7, 2011

DOCUMENT NUMBER: MSDS-0132

WORKPLACE EXPOSURE CONTROLS

ENGINEERING / VENTILATION CONTROLS

LOCAL MECHANICAL EXHAUST

PERSONAL PROTECTION

EYE PROTECTION: SAFETY GLASSES RECOMMENDED AND CAUTION TO USER TO AVOID DIRECT EYE CONTACT WITH "FLASH" OF LIGHT FROM REACTION.

HAND PROTECTION: PROTECTIVE GLOVES RECOMMENDED FOR HANDLING HOT MATERIAL.

RESPIRATORY PROTECTION: USE OF NIOSH APPROVED RESPIRATOR FOR DUST AND METAL FUMES WHEN TLV IS EXCEEDED.

SKIN PROTECTION: GLOVES, APRON AND/OR LONG SLEEVE CLOTHING TO PROTECT SKIN.

VENTILATION: LOCAL EXHAUST MAY BE NECESSARY IF USED IN CONFINED SPACE.

WORK/HYGIENIC:

SECTION 4 FIRE & EXPLOSION HAZARDS

EXPLOSION DATA: NOT APPLICABLE

EXPLOSIVE PROPERTY: LEL: UEL:

EXTINGUISHING MEDIA: DRY SAND OR FLOODING WITH LARGE AMOUNTS OF WATER.

GENERAL FIRE HAZARDS:

FIRE FIGHTING: DIRECT APPLICATION OF WATER IN A HEAVY STREAM OF CONTINUOUS SHOWER IS RECOMMENDED. WATER APPLICATION SHOULD BE AT A REASONABLE DISTANCE. USE OF HAND WATER BUCKETS OR HAND STORAGE PUMP IS NOT RECOMMENDED.

FLAMMABILITY CLASSIFICATION:

FLASH POINT: SELF-IGNITES ABOVE 1750° F (954° C, INDIRECT HEATING)

RATE OF BURN:

UNUSUAL FIRE AND EXPLOSION HAZARDS: SELF-PROPAGATING. HIGH TEMPERATURE REACTION WILL OCCUR IF HEATED ABOVE IGNITION (FLASH POINT) TEMPERATURE AND WILL GENERATE MOLTEN METAL, SLAG AND DENSE SMOKE. VOLATILE, COMBUSTIBLE DECOMPOSITION PRODUCTS PRODUCED FROM PLASTIC PACKAGING.

HAZARDOUS COMBUSTION PRODUCTS: NONE

SECTION 5 SPILL CONTROL MEASURES

MATERIAL SAFETY DATA SHEET

THOMAS & BETTS CORPORATION, 8155 T&B BOULEVARD, MEMPHIS, TENNESSEE 38125

T&B CATALOG NO: SEE SECTION 11 OTHER INFORMATION
FOR A COMPLETE LIST OF T&B CATALOG NUMBERS

PAGE: 4 OF 7

PRODUCT DESCRIPTION: FURSEWELD® WELDING MATERIAL

REVISION: 3

DATE PREPARED: January 7, 2011

DOCUMENT NUMBER: MSDS-0132

CONTAINMENT PROCEDURES:

CLEAN-UP PROCEDURES:

ALL UNUSED, SPILLED MATERIAL MAY BE SWEEPED UP FOR DISPOSAL IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.

EVACUATION PROCEDURES:

SPECIAL PROCEDURES:

DISPOSAL: DISPOSE OF IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

SECTION 6 HANDLING & STORAGE

HANDLING PROCEDURES:

STORAGE PROCEDURES:

MATERIAL SHOULD BE KEPT DRY AND STORED IN "NO SMOKING AND NO OPEN FLAME" AREA, RESTRICTION TO AUTHORIZED PERSONNEL IS RECOMMENDED. MATERIAL MUST BE STORED UNDER SHELTER TO PROTECT BOXES FROM THE ELEMENTS AND RAISED TO PROTECT THEM FROM DAMPNES OR SURFACE WATER.

OTHER PRECAUTIONS: SEE SAFETY INFORMATION ON THE INSTRUCTION SHEET PACKAGED WITH MOLDS AND ADDITIONAL INFORMATION IN THE AMERICAN NATIONAL STANDARDS 249.1 (SAFETY IN WELDING AND CUTTING). THE STORAGE OR SHELF LIFE OF ANY FURSEWELD® MATERIAL CAN BE CONSIDERED AS "INDEFINITE" AS LONG AS THESE CONDITIONS OF STORAGE ARE FOLLOWED.

LABELING:

SECTION 7 TYPICAL PHYSICAL & CHEMICAL PROPERTIES

APPEARANCE:	GRANULAR PARTICLES	AUTO-IGNITION TEMPERATURE:	N/A
BOILING POINT:	N/A	COLOR:	GREY-BLACK
FLAMMABILITY:	N/A	EVAPORATIVE RATE:	N/A
ODOR:	ODORLESS	FREEZING POINT:	N/A
PERCENT, VOLATILE BY VOLUME:	N/A	MELTING POINT:	2000° F (1093° C)
PH:	N/A	OXIDIZING PROPERTIES:	N/A
SOLUBILITY IN WATER 68°F (20° C):	INSOLUBLE	PERCENT, SOLIDS BY WEIGHT:	100
PHYSICAL STATE:			
SOFTENING POINT (FINISH):	N/A	SOFTENING POINT (BASE METAL):	N/A
VAPOR DENSITY (AIR = 1):	N/A	SOLUBILITY IN ORGANIC SOLVENT:	N/A
VISCOSITY:	N/A	SPECIFIC GRAVITY (H₂O = 1):	5.5

MATERIAL SAFETY DATA SHEET

THOMAS & BETTS CORPORATION, 8155 T&B BOULEVARD, MEMPHIS, TENNESSEE 38125

T&B CATALOG NO: SEE SECTION 11 OTHER INFORMATION
FOR A COMPLETE LIST OF T&B CATALOG NUMBERS

PAGE: 5 OF 7

PRODUCT DESCRIPTION: FURSEWELD® WELDING MATERIAL

REVISION: 3

DATE PREPARED: January 7, 2011

DOCUMENT NUMBER: MSDS-0132

VAPOR PRESSURE
(mm Hg): N/A

VOC CONTENT (lbs/gal): N/A

SECTION 8 REACTIVITY DATA

CHEMICAL STABILITY: STABLE

CONDITIONS TO AVOID: AVOID TEMPERATURES ABOVE IGNITION (FLASH POINT)

INCOMPATIBLE
MATERIALS: POSSIBILITY OF VIOLENT REACTION IF MOISTURE PRESENT IN MOLD OR BASE MATERIALS BEING WELDED AT TIME OF USE. TYPICAL OF PROBLEMS ASSOCIATED WITH MOLTEN METALS.

HAZARDOUS
DECOMPOSITION
PRODUCTS: NONE

HAZARDOUS
POLYMERIZATION: WILL NOT OCCUR

SECTION 9 REGULATORY INFORMATION

DEPARTMENT OF TRANSPORTATION (DOT)

PROPER SHIPPING
NAME: NOT REGULATED

ADDITIONAL
INFORMATION: NONE

I.A.T.A. CLASSIFICATION

PROPER SHIPPING
NAME: NOT REGULATED

ADDITIONAL
INFORMATION: NONE

U.S. FEDERAL REGULATIONS

TSCA: ALL COMPONENTS ARE INCLUDED IN THE EPA TOXIC SUBSTANCES CONTROL ACT (TSCA) CHEMICAL SUBSTANCE INVENTORY.

CERCLA: THE PRODUCT IS NOT CLASSIFIED AS A HAZARDOUS SUBSTANCE UNDER REGULATIONS OF THE COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA), 40 CFR §302.

RCRA HAZARD CLASS: THE PRODUCT IS NOT CLASSIFIED AS A HAZARDOUS WASTE UNDER THE RESOURCE CONSERVATION AND RECOVERY ACT, OR ITS REGULATIONS, 40 CFR §261 et seq.

CLEAN AIR ACT: THE PRODUCT IS NOT PROCESSED WITH OR DOES NOT CONTAIN ANY CLASS I OR CLASS II OZONE DEPLETING SUBSTANCES.

SARA TITLE III INFORMATION

SECTION 302: REQUIRES EMERGENCY PLANNING BASED ON THRESHOLD PLANNING QUANTITIES (TPQs), AND RELEASE REPORTING BASED ON REPORTABLE QUANTITIES (RQs) OF EXTREMELY HAZARDOUS SUBSTANCES (EHS) LISTED IN APPENDIX A OF CFR 355. THERE ARE NO COMPONENTS OF THIS MATERIAL WITH KNOWN CAS NUMBERS WHICH ARE ON THE EHS LIST.

MATERIAL SAFETY DATA SHEET

THOMAS & BETTS CORPORATION, 8155 T&B BOULEVARD, MEMPHIS, TENNESSEE 38125

T&B CATALOG NO: SEE SECTION 11 OTHER INFORMATION
FOR A COMPLETE LIST OF T&B CATALOG NUMBERS

PAGE: 6 OF 7

PRODUCT DESCRIPTION: FURSEWELD® WELDING MATERIAL

REVISION: 3

DATE PREPARED: January 7, 2011

DOCUMENT NUMBER: MSDS-0132

SECTION 311 / 312: THE FOLLOWING COMPONENT(S) OF THIS PRODUCT IS SUBJECT TO THIS REQUIREMENT: *NONE*

SECTION 313: THE FOLLOWING COMPONENT(S) OF THIS PRODUCT IS SUBJECT TO THIS REQUIREMENT:

<u>HAZARDOUS COMPONENT(S)</u>	<u>CAS #</u>	<u>% BY WT</u>
COPPER COMPOUNDS	N100	NOT > 55%

FORM R REPORTING REQUIRED FOR 1.0% *De MINIMIS* CONCENTRATION

<u>HAZARDOUS COMPONENT(S)</u>	<u>CAS #</u>	<u>% BY WT</u>
ALUMINUM	7429-90-5	NOT > 40%

FORM R REPORTING REQUIRED FOR 1.0% *De MINIMIS* CONCENTRATION (ONLY FUME OR DUST).

STATE REGULATIONS / RIGHT-TO-KNOW

CALIFORNIA PROPOSITION 65 INFORMATION:

THIS PRODUCT CONTAINS THE FOLLOWING SUBSTANCE(S) KNOWN TO BE ON THE CA PROP. 65 LIST: *NONE*

INTERNATIONAL

WHMIS (CANADA): THIS PRODUCT HAS BEEN CLASSIFIED ACCORDING TO THE HAZARD CRITERIA OF THE CONTROLLED PRODUCTS REGULATIONS AND THE MSDS CONTAINS ALL OF THE INFORMATION REQUIRED BY THE CPR

THE CHEMICAL(S) LISTED ARE CONSIDERED CONTROLLED PRODUCT(S): *NONE*

LABELS: CANADIAN LABEL CLASSIFICATION REQUIRED ON CONTAINER(S): *NONE*

SECTION 10 NOTES

TOXICOLOGICAL INFORMATION

NONE

ECOLOGICAL INFORMATION

NO DATA AVAILABLE

HAZARD RATING SYSTEM

	HMIS	NFPA	KEY
HEALTH	1	1	4 = SEVERE
FLAMMABILITY	1	1	3 = SERIOUS
REACTIVITY	1	1	2 = MODERATE
			1 = SLIGHT
			0 = MINIMAL

MATERIAL SAFETY DATA SHEET

THOMAS & BETTS CORPORATION, 8155 T&B BOULEVARD, MEMPHIS, TENNESSEE 38125

T&B CATALOG NO: SEE SECTION 11 OTHER INFORMATION
FOR A COMPLETE LIST OF T&B CATALOG NUMBERS

PAGE: 7 OF 7

PRODUCT DESCRIPTION: FURSEWELD® WELDING MATERIAL

REVISION: 3

DATE PREPARED: January 7, 2011

DOCUMENT NUMBER: MSDS-0132

REVISION SUMMARY

3

SUPERCEDES ISSUE DATE

May 17, 2007

SECTION 11 OTHER INFORMATION

ABBREVIATIONS

N/E: NOT ESTABLISHED
N/A: NOT AVAILABLE

OTHER

R PHRASE: N/A

S PHRASE: N/A

T&B CATALOG NOS:

45P10	15BKB	115BKB
65P10	25BKB	150BKB
90P10	32BKB	200BKB
115P10	45BKB	250BKB
150P10	65BKB	
200P10	75BKB	FWDEMOKIT
250P10	90BKB	FWDEMOKIT USA

THE INFORMATION PRESENTED HEREIN HAS BEEN COMPILED FROM SOURCES CONSIDERED TO BE DEPENDABLE AND ACCURATE TO THE BEST OF THOMAS & BETTS CORPORATION KNOWLEDGE. THE INFORMATION RELATES TO THE SPECIFIC MATERIAL. IT MAY NOT BE VALID FOR THIS MATERIAL IF USED IN COMBINATION WITH ANY OTHER MATERIALS OR IN ANY PROCESS. IT IS THE USER'S RESPONSIBILITY TO SATISFY HIMSELF AS TO THE SUITABILITY AND COMPLETENESS OF THIS INFORMATION FOR HIS OWN PARTICULAR USE.