



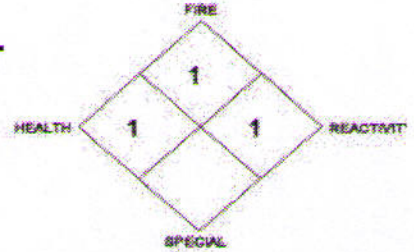
34600 Solon Road • Solon, Ohio 44139-2695  
 (440) 248-0100 • Fax: (440) 248-0723

24 Hour Response  
 Chem Tel (1-800-255-3924)

## MATERIAL SAFETY DATA SHEET

### NFPA HAZARD RATING

- 4 EXTREME
- 3 HIGH
- 2 MODERATE
- 1 SLIGHT
- 0 INSIGNIFICANT



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**PRODUCT FAMILY:** CADWELD<sup>®</sup> ALUMINUM WELDING MATERIAL  
**PRODUCTS INCLUDED:** MATERIAL TYPE A22

DATE PREPARED: 3/8/90

REVISED: 3/03/04

MSDS: 234L

### 1. INGREDIENTS

INGREDIENTS	CAS #	EXPOSURE LIMITS (mg/m <sup>3</sup> )		ACGIH TLV	WEIGHT PERCENT	TSCA INV.
		OSHA PEL				
TIN OXIDE	18282-10-5	2.0		-----	NOT > 45	YES
ALUMINUM	7429-90-5	TOTAL DUST 15.0 RESPIRABLE FRACTION 5.0		DUST 10.0 FUME 5.0	NOT > 45 FUME OR DUST)	YES
COPPER OXIDE	1317-39-1	DUST 1.0 FUME 0.1		DUST 1.0 FUME 0.2	NOT > 15	YES
CALCIUM FLUORIDE	7789-75-5	2.5 AS FLUORIDE		2.5 AS FLUORIDE	NOT > 5	YES

### 2. PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT: N/A  
 VAPOR PRESSURE: N/A  
 VAPOR DENSITY: N/A  
 SOLUBILITY IN WATER: Insoluble, 0  
 SPECIFIC GRAVITY (H<sub>2</sub>O=1): 5  
 MELTING POINT: @ 250°C (482°F)  
 EVAPORATION RATE (BUTYL ACETATE=1): N/A  
 APPEARANCE AND ODOR: Silvery-white powder; Odorless

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### 3. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED): Self ignites above 899°C (1650°F) (Indirect Heating).

FLAMMABLE LIMITS: LEL - N/A UEL - N/A

EXTINGUISHING MEDIA: None

SPECIAL FIRE FIGHTING PROCEDURES: Water application should be at a reasonable distance. Use of hand water buckets or hand storage pumps is not recommended.

UNUSUAL FIRE AND EXPLOSION HAZARD: Material suspended in dust-laden air cloud may ignite at lower than normal ignition temperature.

### 4. REACTIVITY DATA

STABILITY: Stable

CONDITIONS TO AVOID: Temperature above ignition.

INCOMPATIBILITY (MATERIALS TO AVOID): Will react with moisture, mineral acids, halogenated compounds, and harsh alkalis. Avoid exposure to open flames or other possible ignition sources.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: None

HAZARDOUS POLYMERIZATION: Will not occur.

### 5. HEALTH HAZARD DATA

ROUTES OF ENTRY: Primary route of entry - Inhalation.

HEALTH HAZARDS: Burns from contact with reaction or reaction products. Dust and fumes are irritants to eyes and upper respiratory tract.

CARCINOGENICITY: NTP - No IARC MONOGRAPHS - No OSHA REGULATED - No  
SIGNS/SYMPTOMS OF EXPOSURE: (See Health Hazards)

EMERGENCY AND FIRST AID PROCEDURES: Standard treatment for burns. For inhalation of dust, fume, remove from exposure, provide fresh air, flush eyes with water, consult physician.



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ERICO, INC.

34600 Solon Road

Solon, Ohio 44139

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**6. PRECAUTIONS FOR SAFE HANDLING AND USE**

**ACTION TO TAKE FOR SPILLS/LEAKS:** All unused, spilled materials may be swept up for disposal using soft, dry sponge or soft natural fiber brush, and non-sparking conductive scoop. Avoid actions that would cause material to disperse in air.

**WASTE DISPOSAL METHOD:** Contact factory for assistance or dispose of in accordance with Federal, State, and Local regulations.

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:** Materials should be kept dry and stored in "NO SMOKING OR OPEN FLAME" area. Restriction to authorized personnel is recommended.

**7. CONTROL MEASURES**

**RESPIRATORY PROTECTION:** Where TLV is exceeded, use NIOSH approved particulate respirator.

**VENTILATION:** Local Exhaust - Use only when TLV is exceeded. Mechanical - Must be specifically approved for use with reactive, combustible dust.

**PROTECTIVE GLOVES:** Recommended for handling hot equipment.

**EYE PROTECTION:** Safety glasses recommended and caution to user to avoid direct eye contact with "flash" of light from reaction.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** None

**8. ADDITIONAL INFORMATION**

This product contains compounds which are subject to reporting requirements of Section 313 of Title III of SARA and 40 CFR 372.

*T. J. ...*