

MATERIAL SAFETY DATA SHEET

OSHA - Meets 29 CFR 1910.1200 Standards

HMIS HAZARD RATINGS

HEALTH	1	0 = INSIGNIFICANT	3 = HIGH
FLAMMABILITY	0	1 = SLIGHT	4 = EXTREME
PHYSICAL HAZARD	0	2 = MODERATE	



TRANSPORTATION INFORMATION

PROPER SHIPPING NAME:	Not Regulated		
HAZARD CLASS / PKG GRP:	Not regulated	REF:	Not Applicable
IDENTIFICATION NUMBER:	None	LABEL:	None Required

SECTION 1 - PRODUCT / COMPANY IDENTIFICATION

IDENTITY (AS USED ON LABEL AND LIST)

Page 1 of 2

172 Standard Weld Metal

MANUFACTURER'S NAME

Thermoweld

EMERGENCY TELEPHONE NUMBER

Infotrac (800) 535-5053 Outside USA (352) 323-3500

ADDRESS (NUMBER, STREET, P.O. BOX)

4102 South 74th East Ave.

TELEPHONE NUMBER FOR INFORMATION

(800) 558-1373

(CITY, STATE AND ZIP CODE)

Tulsa, OK 74145

DATE PREPARED: December 23, 2004

SUPERSEDES: May 28, 2003

SECTION 2 - HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

HAZARDOUS COMPONENTS (SPECIFIC CHEMICAL IDENTITY; COMMON NAME(S))	CAS #	% (OPTIONAL)	OSHA PEL		ACGIH TWA		SARA TITLE III	RQ LBS
			PPM	MG/M3	PPM	MG/M3		
Cuprous oxide (a)	1317-39-1	60 - 90		1			Yes	
Copper (a,b)	7440-50-8	7 - 13			1.0	1.0	Yes	5000
Aluminum (fume or dust) (a)	7429-90-5	7 - 13			15	10	Yes	
Calcium fluoride	7789-75-5	1 - 5	not established					
Tin	7440-31-5	1 - 5			2	2		

(a) A "Yes" in the SARA TITLE III column in Section 2 indicates a toxic chemical subject to annual reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

(b) The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) has notification requirements for releases or spills to the environment of the Reportable Quantity (RQ for this mixture > 24000 lbs) or greater amounts, if < 4 μ diameter, according to 40 CFR 302.

SECTION 3 - HEALTH HAZARD DATA

ROUTES OF ENTRY - SIGNS AND SYMPTOMS OF EXPOSURE

EMERGENCY AND FIRST AID PROCEDURES

INHALATION: Breathing airborne particles or dust from mixing, spraying, sanding, grinding, etc. may cause irritation to respiratory tract. Contains substances which are considered nuisance dusts which require a NIOSH approved respirator when airborne particulate exceeds maximum allowable limit.

Remove affected person to fresh air; if symptoms persist seek medical attention.

SKIN: None expected, however, prolonged contact may cause irritation.

Remove contaminated clothing; wash affected area with soap and water; launder contaminated clothing before reuse; if irritation persists, seek medical attention.

EYES: Contact with eyes may cause irritation.

Remove contact lenses. Flush eyes with clear running water for 15 minutes while holding eyelids open; if irritation persists, seek medical attention.

INGESTION: May cause gastric distress, stomach pains, vomiting and diarrhea.

Give two glasses of water for dilution; induce vomiting as directed by medical personnel; never give anything by mouth to an unconscious person; seek medical attention.

CARCINOGENICITY

NTP?

No

IARC MONOGRAPHS?

No

OSHA REGULATED?

No

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Preexisting skin, eye, or respiratory disorders may become aggravated through prolonged exposure.

MATERIAL SAFETY DATA SHEET

IDENTITY (AS USED ON LABEL AND LIST)
172 Standard Weld Metal

Page 2 of 2
Date: December 23, 2004

SECTION 4 - FIRE FIGHTING MEASURES

FLASH POINT (METHOD USED)
Not applicable

NFPA RATING
None

FLAMMABLE LIMITS
LEL: Not applicable UEL: Not applicable

EXTINGUISHING MEDIA
Use dry sand, graphite, dolomite, sodium chloride, water spray or chemical foam.

SPECIAL FIRE FIGHTING PROCEDURES
Firefighters must wear full facepiece self - contained breathing apparatus in positive pressure mode.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Thermoweld copper base welding/joining materials are exothermic mixtures, which when reacted, produce hot molten materials with temperatures in excess of 4000° F and a localized release of smoke. The materials are not explosive, ignition temperatures are in excess of 850° F for starting material and 1750° F for base material. They are not shock sensitive, nor are they subject to spontaneous ignition. Should the material be accidentally ignited, the immediate and direct application of large volumes of water will effectively retard the spread of fire and control it. Large amounts of dense, dusty smoke will be liberated during an accidental fire.

SECTION 5 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Confine and segregate product for reuse; place material into approved containers for disposal; for spills in excess of allowable limits (RQ) notify the National Response Center (800) 424 - 8802; refer to CERCLA 40 CFR 302 for detailed instructions; refer to SARA Title III, Section 313, 40 CFR 372 for reporting requirements. Do not discharge into lakes, ponds, streams or public waters.

SECTION 6 - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Storage of Thermoweld Exothermic materials should be in a clean dry area and restricted to access by authorized personnel only. Do not subject to rough handling or physical damage, nor excessive vibration. Store in accordance with "This Side Up" labels. Protect from weather and moisture. DO NOT USE PRODUCTS THAT HAVE BEEN EXPOSED TO MOISTURE. Before using Thermoweld Exothermic Process, personnel should be trained by a Thermoweld representative. Read and understand the instruction sheet packaged with the mold, and observe all general and safety instructions.

SECTION 7 - EXPOSURE CONTROLS / PERSONAL PROTECTION

RESPIRATORY PROTECTION (SPECIFY TYPE): NIOSH approved respirator designed to remove airborne particulate present in excess of maximum allowable concentrations due to secondary operations such as mixing, spraying, sanding, buffing, etc. Refer to 29 CFR 1910.134 or European Standard EN 149 for regulations.

VENTILATION LOCAL EXHAUST: Recommended
MECHANICAL (GENERAL): Yes

SPECIAL: None
OTHER: None

PROTECTIVE GLOVES: Neoprene or rubber gloves. EYE PROTECTION: Protective eyeglasses or chemical safety goggles.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Safety eyebath nearby

WORK / HYGIENIC PRACTICES: Practice safe workplace habits. Minimize body contact with this, as well as all chemicals in general.

SECTION 8 - PHYSICAL / CHEMICAL PROPERTIES

BOILING POINT Not applicable SPECIFIC GRAVITY (WATER = 1) Approximately 6.0

VAPOR PRESSURE (MM Hg) Not applicable pH Not applicable

VAPOR DENSITY (AIR = 1) Not applicable EVAPORATION RATE (WATER = 1) Not applicable

SOLUBILITY IN WATER Insoluble % VOLATILE (BY WEIGHT) None

APPEARANCE AND ODOR Gray / silver granules, characteristic odor

SECTION 9 - STABILITY AND REACTIVITY

STABILITY UNSTABLE: STABLE: XXX CONDITIONS TO AVOID: Avoid generating airborne dust

INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizers, strong acids

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Decomposition will not occur if handled and stored properly. In case of fire, smoke, oxides of carbon; fumes of copper and aluminum. Small amounts of fluoride fume or hydrofluoric acid fume may be released under ignition.

HAZARDOUS POLYMERIZATION MAY OCCUR: WILL NOT OCCUR: XXX CONDITIONS TO AVOID: None

SECTION 10 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Dispose of in accordance with Local, State, and Federal Regulations. Do not flush to sanitary sewer or waterway. Refer to "40 CFR Protection of Environment Parts 260 - 299" for complete waste disposal regulations. Consult your local, state, or Federal Environmental Protection Agency before disposing of any chemicals.

The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.