THERMADYNE

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MATERIAL SAFETY DATA SHEET

Date Prepared: January 1, 1991
Date Revised: March 1, 2007

Form Number: 0056-1286
Core Part No: 1440-0010

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This MSDS is based on air/fuel or oxy/fuel process. There may be other cautions for electric process.

Material Safety Data Sheet

SECTION I - MATERIAL IDENTIFICATION

Product Name: HTFC - 1 (1440-0010)
Product Use: Brazing Alloy

SECTION II - HAZARDOUS INGREDIENTS

OSHA Hazardous Components (29 CFR 1910.1200) EXPOSURE LIMITS: 8 HR. TWA

		OSHA PEL	ACGIH TLV	
Copper, Cu	(CAS # 7440-50-8)	0.1 mg/m^3	0.2 mg/m^3	fume
Silver, Ag	(CAS # 7440-22-4)	0.01 mg/m^3	0.1 mg/m^3	metal
Tin, Sn	(CAS # 7440-31-5)	2.0 mg/m^3	2.0 mg/m^3	
Zinc oxide	(CAS # 1314-13-2)	5.0 mg/m^3	5.0 mg/m^3	fume
Powdered Fluorides	(not listed)	2.5 mg/m^3	2.5 mg/m^3	

SECTION III - HAZARDS IDENTIFICATIONS

EMERGENCY OVERVIEW: Harmful if inhaled. Gas irritating to eyes and respiratory tract. Suspect cancer hazard.

POTENTIAL HEALTH EFFECTS:

INHALATION: Fume and/or dust moderately irritating to eyes and respiratory tracts.

EYE CONTACT: Fume and/or dust causes eye irritation.

SKIN CONTACT: Exposure to hot material may cause thermal burns. No hazard in normal industrial use.

INGESTION: No hazard in normal industrial use.

CHRONIC: Possible cancer hazard (contains material) which may cause cancer based on animal data. Contains nickel. Prolonged or repeated overexposure causes lung damage.

CARCINOGENICITY: LISTED IN NTP? Yes IARC? Yes OSHA Regulated? No

SECTION IV - FIRST AID MEASURES

INHALATION: No specific treatment is necessary since this material is not likely to be hazardous by inhalation. If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other symptoms develop.

EYE CONTACT: Immediately flush eyes with plenty of water. Get medical attention if irritation persists. If exposed to fumes or vapors, flush eyes with large amounts of water for at least 15 minutes.

SKIN CONTACT: Remove contaminated clothing. Wash skin with soap and water. Get medical attention.

INGESTION: Swallowing less than an ounce will not cause significant harm. For larger amounts, do not induce vomiting, but give one or two glasses of water to drink and get medical attention.

SECTION V - FIRE FIGHTING MEASURES

Flashpoint (Method): Non-Flammable material.
Flammable Limits: **Lower:** NA **Upper:** NA
Autoignition Temperature: NA

GENERAL HAZARD: Material will not burn. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

FIRE FIGHTING INSTRUCTIONS: As in any fire, wear self-contained breathing apparatus (pressure-demand, MSHA/NIOSH approved or equivalent) and full protective gear.

EXTINGUISHING MEDIA: Use extinguishing media for surrounding conditions.

HAZARDOUS COMBUSTION PRODUCTS: Smoke, oxides of carbon and fluorine, zinc oxide.

SECTION VI - ACCIDENTAL RELEASE MEASURES

LAND SPILL: Vacuum or sweep up material and place in a disposal container. Collect scrap for remelting. Do not flush to sewer.

WATER SPILL: Collect and place in chemical waste container for disposal.

SECTION VII - HANDLING AND STORAGE

Wash thoroughly after handling. Use only in a well ventilated area. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Store in a cool dry place.

SECTION VIII - EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product.

PERSONAL PROTECTION: If TLV exceeded, NIOSH approved respirator recommended.

PROTECTIVE CLOTHING: Wear safety glasses with side shields (or goggles) and a face shield.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

Vapor Pressure:	NA	**Vapor Density (Air=1):**	NA
Specific Gravity:	7.5	**Evaporation Rate**	
Solubility in Water:	Insoluble	**(n-Butyl Acetate=1):**	NA
pH:	NA	**Freezing Point:**	NA
Boiling Point:	Decomposes		

Appearance & Odor: Blue coated solid wire with no odor.

SECTION X - STABILITY AND REACTIVITY

GENERAL: Stable

INCOMPATIBLE MATERIALS: Strong acids.

CONDITIONS TO AVOID: Open flames.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION XI - TOXICOLOGICAL INFORMATION

No data available.

SECTION XII - ECOLOGICAL INFORMATION

No data available.

SECTION XIII - DISPOSAL CONSIDERATIONS

Classification required before disposal. Follow all federal, state and local requirements.

SECTION XIV - TRANSPORTATION INFORMATION

PROPER SHIPPING NAME: HTFC - 1, not regulated
HAZARD CLASS: None
IDENTIFICATION NUMBER: None
DOT Emergency Guide #: None
Reportable Quantity (RQ): None

SECTION XV - REGULATORY INFORMATION

TSCA (Toxic Substance Control Act) All components are listed on the TSCA inventory.

CERCLA (Comprehensive Environmental Response, Compensation and Liability Act):
None. We recommend you contact local authorities for other reporting requirements.

SARA TITLE III (Superfund Amendments and Reauthorization Act):
311/312 Hazard Categories: Acute, Chronic

313 Reportable Ingredients: Zinc compounds, Copper compounds, Silver compounds.

SECTION XVI - OTHER INFORMATION

Brazing rod or wire is a non-hazardous solid at ambient temperature. Hazards, as defined by OSHA 29 CFR 1910.1200, may result from fume or dust generated during brazing. The composition and quantity of both are dependent upon the metal being brazed and the procedures being used. Other conditions which influence the hazards associated with brazing include the filler material, the coatings on the metal, the number of people being exposed, and the quality of the ventilation. It is recommended that the composition of the fumes, gases, and dust to which the workers are exposed be classified by sampling the air in the worker's breathing zone and performing a hazard evaluation. See ANSI/AWS f1.1 available from the American Welding Society, P.O. Box 351040, Miami, FL 33135.

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FOOTNOTES:
NA - Not Applicable NE - Data Not Established CS - Cancer Suspect Agent OX - Oxidizer ND - No Data Cor - Corrosive
CALC - Calculated EST - Estimated STEL - Short Term Exposure Limit TLV - Threshold Limit Value
PEL - Permissible Exposure Limit TWA - Time Weighted Average, 8 hours