

MATERIAL SAFETY DATA SHEET

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SECTION 1 - PRODUCT IDENTIFICATION AND USE

Product Identifier: 14 Karat Yellow Heat Treatable Alloys 585HT and 007. (Note 585 alloy is 14.04 Kt minimum as required for some markets.)

Product Application: Supplied as plate or wire for use in the manufacture of jewelry items.

Manufacturers Name: **IMPERIAL SMELTING AND REFINING CO. LTD.**

Complete Address: 451 DENISON ST. MARKHAM, ONTARIO L3R 1B7

Emergency Telephone No.: (905) 475-956

Suppliers Name:

Complete Address:

Emergency Telephone No.:

SECTION 2 - HAZARDOUS INGREDIENTS

Hazardous Ingredients	%	CAS #	TLV (mg/m3)	STEL (mg/m3)
GOLD	50.00 - 60.00	7440-57-5	N.AV	N.AV
SILVER	5.00 - 15.00	7440-22-4	0.10	N.AV
COPPER	20.00 - 40.00	7440-50-8	0.2	2.0
ZINC	1.00 - 10.00	7440-66-6	5.0	10.0

SECTION 3 - PHYSICAL DATA

Alloy	585HT	14Kt YHTA007
Physical State -	SOLID	SOLID
Appearance -	PLATE OR WIRE AT VARIOUS DIMENSIONS	PLATE OR WIRE AT VARIOUS DIMENSIONS
Density (g/cm3) -	13.10	13.08
Liquidus (C) -	879	879
Solidus (C) -	845	845

Information Not Applicable: Odour threshold; vapour pressure; vapour density; evaporation rate; pH

SECTION 4 - FIRE AND EXPLOSION DATA

Flammability: None

Explosion Data: None

Extinguishing Media: Class D extinguisher; sand or other non-flammable solid

Information Not Applicable: Flashpoint; upper and lower flammable limit; auto ignition temperature; hazardous combustion products

SECTION 5 - REACTIVITY DATA

Chemical Stability: Product as supplied is stable under normal ambient working conditions

Incompatibility: Keep away from strong acids, halogens and acetylene. Products made from the sheet or wire form of this alloy include charms and posts. Although annealing stages may be included when processing this alloy, it should not be heated to or over the solidus value. If items are to be soldered to this product, or if it is inadvertently melted, it is important to note that small additions of water to molten metal can cause an explosion and must be avoided – make sure any solder joint is solid before quenching a joined assembly.

Hazardous Decomposition Products: Product may decompose and liberate metal fumes if heated over 1030°C. Use at temperatures over 845°C is not expected. It is recommended that annealing temperatures be well below the solidus value listed.

SECTION 6 - TOXICOLOGICAL PROPERTIES

Route of Entry: Inhalation or skin contact

Effects of Acute Exposure to Material: Fume generation is not expected when this alloy is used for the application designed. Should it inadvertently be heated to over the solidus value, avoid inhalation of freshly formed fume as METAL FUME FEVER may result. Initial symptoms include dryness and irritation of the throat. Several hours after exposure signs can include a metallic taste in the mouth, headache, fever, chills, excessive sweating, muscle pains, nausea, vomiting and weakness. Recovery from symptoms reportedly occurs within 48 hours. Metal fume fever is not usually fatal. Seek appropriate medical attention if symptoms are severe.

Effects of Chronic Exposure: There are no known chronic effects relating to repeated incidences of metal fume fever.

Carcinogenicity: Unknwn.

Teratogenicity: N. Av.

Mutagenicity: N. Av.

Synergistic Materials: None Known.

LD50: N. Av.

LC50: N. Av.

SECTION 7 - PREVENTIVE MEASURES

Engineering Controls: Excessive fume generation is not expected under normal use of this alloy. Should low levels of fume generation be seen, use appropriate dilution or targeted ventilation to remove fume from breathing zone. Should higher level fume generation occur use of targeted, local exhaust / ventilation is recommended. A health and safety consultant can assess your specific ventilation needs. References include: Industrial Ventilation: A manual recommended practice; by the ACGIH.

Personal Protective Equipment:

Gloves: Wear hand protection to suit the operation involved whenever strip or wire are processed. Dermal irritation is not generally reported. Should it occur wear suitable hand protection.

Respirator: Low fume concentrations in vicinity of TLV, use portable fume respirator or high efficiency particulate filter (NIOSH APPROVED)

Consult: CSA STD. Z94. 4-M1982 "Selection, Care and Use of Respirator"

Eye Protection: Wear eye protection suited to the work environment, including tinted or plain shielded safety glasses and / or face visors.

Consult: CSA STD. Z94.3-M1982 "Industrial Eye and Face Protectors"

Leak and Spill Procedures:

Spill of molten metal is not expected as this alloy is not intended for use as casting grain. Should one occur, smother with sand or other suitable class D extinguishing media.

Spill of solid metal should be collected and contained. It should not be re-used if foreign material has been mixed in with the spilled metal during the collection stage.

Waste Disposal: Return to manufacturer for refining

Storage Requirements: Store in dry container away from incompatibles

SECTION 8 - FIRST AID MEASURES

If a person breathes large amounts of metal fume, move them to fresh air. If breathing has stopped, perform artificial respiration and arrange for medical attention. Keep the person warm and at rest. If breathing is difficult, provide oxygen. Take the person to medical attention if they exhibit symptoms of metal fume fever noted in Section 6. Administer normal first aid to cuts, scratches and burns. If dermal irritation initiates from handling material, wash affected area thoroughly with soap and water.

SECTION 9 - PREPARATION DATE OF MSDS

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