

# Material Safety Data Sheet

Ti wire

## SECTION 1 – PRODUCT IDENTIFICATION

### 1. IDENTIFICATION

Product Name: Ti wire  
Typical Use: Welding Wire, Thermal Spray Wire, Welding Electrode, Sheet  
Manufacturer: Wisdom Consumables  
Rm1202 Block No.1288 Zhennan Rd Shanghai 200331, China

## SECTION 2 – HAZARDOUS INGREDIENTS IMPORTANT!

This section covers the material from which these products are manufactured. Fumes and gases produced when welding or spraying with normal use of these products are covered in Section 5. Components CAS No. OSHA TWA (mg/m<sup>3</sup>) ACGIH TWA (mg/m<sup>3</sup>) Wt. % Tin (Sn) 7440-31-5 2.0mg/m<sup>3</sup> -- 99.9 1 Subject to reporting requirements of Section 313 of the Emergency Planning & Community Right-to-Know Act of 1986 (SARA) and 40 CFR Part 372. Chromium and its compounds, cobalt and its compounds, nickel and its compounds and vanadium and its compounds are classified as carcinogens by either NTP and/or IARC.

## SECTION 3 - PHYSICAL/CHEMICAL CHARACTERISTICS

Solid Wire, Odorless, Insoluble, Silver in appearance

## SECTION 4 – FIRE AND EXPLOSION HAZARD DATA

(Nonflammable)

Thermal spray and welding arcs and sparks can ignite combustibles and flammables. Refer to American National Standard Z49.1 for fire prevention during the use of welding and allied procedures.

NFPA NUMERICAL CODES: Health Hazard 0 Fire Hazard 1 Reactivity Hazard 0

## SECTION 5 – REACTIVITY DATA

Arc fumes and gases cannot be classified simply. The composition and quantity of both are dependent upon the sprayed, the process, procedure and materials used. Other conditions which also influence the composition and quantity of the fumes and gases to which workers may be exposed include: coatings on the metal sprayed (such as paint, plating, or galvanizing), the number of arc spray units and the volume of work area, the quality and amount of ventilation, the position of the operator's head with respect to the fume plume, as well as the presence of contaminants in the atmosphere (such as chlorinated hydrocarbon vapors from cleaning and degreasing activities).

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When the material is consumed, the fume and gas decomposition products generated are different in percent and form from the ingredients listed in Section 2. Fume and gas decomposition products, and not the ingredients in the material, are important. The concentration of a given fume or gas component may decrease or increase by many times the original concentration in the material. Also, new compounds not in the electrodes may form. Decomposition products of normal operation include those originating from the volatilization, reaction, or oxidation of the materials shown in Section 2, plus those from the base metal and coatings, etc., as noted above. Reasonably expected decomposition products from normal use of these products include a complex of the oxides of the materials listed in Section 2, as well as carbon monoxide, carbon dioxide, ozone and nitrogen oxides. The fume limit for chromium and nickel may be reached before the general limit for welding fumes (5 mg/m<sup>3</sup>) is reached.

One recommended way to determine the composition and quantity of fumes and gases to which workers are exposed is to take an air sample inside the operator's helmet if worn or in the worker's breathing zone.

See ANSI/AWS F1.1 "Method for Sampling Airborne Particles Generated by Welding and Allied Processes" and "Characterization of Arc Welding Fume" available from the American Welding Society, 550 N.W. LeJeune Road, Miami, FL 33126