WELDTRONIC INTERNATIONAL P/L

SA F E T Y D A T A S H E E T

For Welding Consumables and Related Products

Essentially similar to U.S Department of Labor Form OSHA-20

SECTIONI- IDENTIFICATION

Supplier Name: WELDTRONIC INTERNATIONAL P/L Telephone No. 03 9702 9366 Website. www.weldtronic.com.au

Address NO. 42-46 Micro Circuit, Dandenong South, Victoria, Australia 3175

Product Type

HARD FACING / CUTTING / GOUGING ELECTRODES

Trade Name WAHF35032, WAHF35040, WAHF35032.05, WAHF70032, WAHF70040, WAHF70032.05, WAGR32, WAGR40, WACR32, WACR40. AWS Classification

SECTIONII- HAZARDOUS COMPONENTS/IDENTITY INFORMATION

Hazardous Components (specific Chemical Identity):		CAS No	% By Weight	TVL(mg/m3)
1.	Titanium Dioxides	13463 –67 – 7	1-45	10
2.	Calcium Carbonate	1317- 65 – 3	1-10	10
3.	Calcium Fluoride	1454 - 23 - 5	1-10	2.5
4.	Iron	1332 - 58 - 7	Bal.	5
5.	Chromium	7440 - 47 - 3	11-32	0.05(Chromium VI)
6.	Nickel	7440 - 02 - 0	4-22	1.5
7.	Molybdenum (316L type only)	7439 - 98 - 7	2-3	10
8.	Manganese	7439 - 96 - 5	0.5-2.5	0.2
9.	Copper	7440 – 50 – 8	0.75	0.12
10.	Silicon	60676 – 86 - 0	0.90	10

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	N/A	Specific Gravity (H_2O=1)	N/A
Vapor Pressure (mm Hg)	N/A	Melting Point	N/A
Vapor Density (AIR=1)	N/A	Evaporation Rate (Butyl Acetate=1)	N/A
Solubility in Water	N/A		
Appearance and Odor	Shine silver appearance.		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

(Continued On Back Side)

Flash Point (Method Used)	Flammable Limits	LEL	UEL
N/A	N/A	N/A	N/A

Extinguishing Media See below

Special Fire Fighting Procedures See below

Unusual Fire and Explosion Hazards

Welding ARC 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.

SECTION V - REACTIVITY DATA

Incompatibility (Metals to Avoid) None

Hazardous Decomposition Products

The composition and quality of welding fumes and gases are dependent upon the metal being welded, The process, procedure and electrodes used. Other conditions which also influence the composition and quantity of fumes and gases to which workers may be exposed include: coatings on metal being welded (such as paint, plating, or galvanizing), the number of welders and the volume of the worker area, the quality and amount of ventilation, the position of the welder'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.)

When the electrode is consumed, the fume and gas decomposition products generated are different in percent and form from the ingredients listed in Section II. Decomposition products of normal operation include those originating from the volatilization, reaction, or oxidation of the materials shown in Section II, plus those from the base metal and coating, etc., as noted above.

Reasonably expected fume constituents of this product would include: Primarily iron oxide and manganese oxides; secondarily complex oxides of chromium, potassium, silicon and sodium.

Maximum fume exposure guideline for this product (based on manganese content) is 0.5 milligrams per cubic meter

SECTION Vl - HEALTH HAZARD DATA

Route(s) of Entry:

Inhalation, Skin, Ingestion

Health Hazards

Electric ARC-welding may create: Fumes and gases can be dangerous. Arc rays can injure eyes and burn skin. Electric shock can kill.

Carcinogenicity

The state of California requires the following information:

Warning: This product contains chemicals known to the state of California to cause cancer.

Signs and Symptoms of Exposure

See below.

Medical Conditions from Exposure

Short term to Welding fumes-dizziness nausea, dryness & irritation of nose, eyes and throat, chest tightness, fever, allergic reaction, long term-siderosis, believed to affect pulmonary function. Nickel and Chromium compounds are required by Osha to be considered carcinogenic.

Emergency and First Aid Procedures

Remove to fresh air, obtain medical attention. Employ first aid techniques recommended by AM. Red Cross.

SECTION Vll - PRECAUTIONS FOR SAFE HANDLING AND USE

Spill and Leak Procedure

N/A

Waste and Disposal Method

Prevent waste from contaminating surrounding environment. Discard any product residue, disposable container or liner in environmentally acceptable manner, In full compliance with federal, state, and local regulations.

Precautions to be Taken in Handling and Storing

None

Other Precautions

Use product in accordance with ANSI Standard Z49.1, Safety in welding and cutting available from AWS, 550 NW. Lejnue Rd., POB 351040, Miami, Fl33135 Phone 305-443-9353

SECTION Vlll - CONTROL MEASURES

Respiratory Measures

Use restorable fume respiratory or air supplied respirator when in confined space or local exhaust does not keep exposure below recommended exposure limit.

Ventilation

Use enough local ventilation, and local exhaust at ARC to keep fumes and gases from workers breathing zone and general area. Train worker to keep head out of fumes.

Local Exhaust	-	Special	-
Mechanical (General)	-	Other	-

Protective Gloves

See other protective equipment

Eye Protection

Wear helmet, face shield with filter lens, protective screens, flash goggles to shield others, start with shade too dark then go to lighter shade which gives sufficient view of weld zone.

Other protective Equipment

Hand, head, body protection to prevent injury form radiation, sparks and electrical shock.

Work/Hygienic Practices

Do not touch live electrical parts and insulate from work and ground. For maximum safety: be certified for, and wear a respirator at all times when welding or brazing.