

Material Safety Data Sheet

ER70S-2, ER70S-3,ER70S-6

Section 1: Product Information

Supplier's Name



Manufacturer's Name

Refer to supplier

Address

2300 Winston Park Dr.
Oakville, ON L6H 7T7

Address

Refer to supplier

Telephone Number

(905) 829-8780
1-800-268-4833

Telephone Number

Refer to supplier

Trade Name

N/A

Chemical Family

Metals

Chemical Formula:

N/A

Product Use

GMAW & GTAW

Section 2. Hazardous Ingredients

Low-alloy welding wire <5% Cr, <1% Ni, <1% Co

No substances classifiable as toxic and/or noxious

Ingredient	Approx.	CAS Number	OSH PEL	ACGIH-TLV		
	Concentration %			mg/m3	LC50	LD50
Iron	96	7439-89-6*	N/A	5.0	N/A	N/A
Manganese	1.0-2.0	7439-96-5*	N/A	5.0	N/A	N/A
Silicon	0.5-1.2	7440-21-3*	N/A	0.1	N/A	N/A
Copper	0.5	7440-50-8	N/A	N/A	N/A	N/A
Other	Traces		N/A	N/A	N/A	N/A
Ozone		10028-15-6	N/A	0.2	N/A	N/A

* Hazard appears as fume

Section 3: Physical Data

Physical State: Solid	Boiling Point: N/A
Odour and Appearance: Wire. Odourless	Melting Point: 1600°C
Odour Threshold (PPM): N/A	Solubility in Water (20°C) N/A
Specific Gravity: N/A	% Volatile (by Volume): N/A
Vapour Pressure (MM): N/A	pH: N/A
Vapour Density (Air =1): N/A	Coefficient of Water/Oil Distribution: N/A
Evaporation Rate: N/A	

Section 4: Fire or Explosion Hazard

Flammable: No. Keep flammable materials away from work area.
Means of Extinction: N/A
Flashpoint: N/A
Upper Flammable Limit (% by volume): N/A
Lower Flammable Limit (% by Volume): N/A
Auto ignition Temperature: N/A
Hazardous Combustion Products: None
Explosion data-sensitivity to mechanical impact: N/A
Explosion data-sensitivity to static discharge: N/A

Section 5: Reactivity Data

Chemical Stability: Yes
Incompatibility to other substances: N/A
If so, which ones? N/A
Reactivity under what conditions? Strong acids and bases
Hazardous decomposition products:
Welding fumes and gases cannot be classified simply. The composition and quantity of both are dependent upon the metal being welded, the process, procedures and filler metal being 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 being welded (such as paint, plating, galvanizing, etc.), the number of welders and the volume of the work area, the quality and amount of the 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 vapours from cleaning and degreasing activities).

Section 5: Reactivity Data (continued)

When the filler metal is consumed, the fume and gas produced are different in percent and form from the ingredients listed in the section Hazardous Ingredients.

Decomposition products of normal operation include those originating from the volatilization reaction, or oxidation of the materials shown in the section Hazardous Ingredients, plus those from the base metal and coating, etc.

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 welder's helmet if worn or in the worker's breathing zone. (See ANSI/AWS F1.1 available from the "American Welding Society", also F1.3 "Evaluating Contaminants in the Welding Environment-A Sampling Strategy Guide", which gives additional advice on sampling.

Section 6: Toxicological Properties

Route of Entry:

Skin Contact: No
Skin Absorption: No
Eye Contact: No
Inhalation Acute: Yes
Inhalation Chronic: Yes
Ingestion: No

Fumes and gases can be dangerous to your health. Preexisting respiratory or allergic conditions may be aggravated in some individuals.

Effects of acute exposure to the material:

Short-term exposure to welding fumes may result in discomfort such as dizziness, nausea or dryness or irritation of nose, throat or eyes; tightness in chest, fever and allergic reaction.

Effects of chronic exposure to the material:

Long term over exposure to welding fumes may lead to siderosis (iron deposits in lungs).

Exposure Limits	5 mg/m ³	Reproductive Toxicity	N/A
Irritancy of Material	N/A	Teratogenicity	N/A
Sensitization to Material	N/A	Mutagenicity	N/A
Carcinogenicity	N/A	Toxicologically synergistic products	N/A

