

Wuhan Sunny Industry & Trade Co.,Ltd

Material Safety Data Sheet

For welding consumables and related products
Essentially similar to U.S Department of labor form OSHA-20

Section I - Identification

Manufacturer/Supplier name:	Wuhan Sunny Industry & Trade Co.,Ltd	
Address:	1282 jiefang avenue,Wuhan,China	Post code:430010
Telephone number:	86-27-82726189	
Product type:	Stainless steel electrodes	
Trade name:	HBE308L-16,HBE309L-16,HBE310-16,HBE312-16,HBE316L-16	
AWS classification:	AWS E308L-16,E309L-16,E310-16,E312-16,E316L-16	

Section II - Hazardous components/Identity information

Components	CAS No.	TLV(mg/m3)
Iron	7439-89-6	10 as Fe2O3
Carbon	7440-44-0	2
Silicon	7440-21-3	3 as SiO2
Manganese	7439-96-5	1
Sulfur	7704-34-9	0.2
Phosphorous	7723-14-0	10
Chromium	7440-47-3	0.05
Molybdenum	7439-98-7	10
Nickel	7440-02-0	1
Copper	7440-50-6	N/A
Vanadium	7440-62-2	N/A

Section III - Physical/Chemical characteristics

Boiling point	N/A	Specific gravity(H2O=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		
Odor	N/A		

Section IV - Fire and explosion hazard data

Flash point (method used)	N/A	Flammable limits N/A	LEL N/A	UEL 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

Stability Stable	Unstable	No	Conditions to avoid
	Stable	Yes	None unless otherwise specified

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 quality of fumes and gases to which workers may be exposed includes:

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 VI - 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.

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 VII - 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, POX 351040, Miami, FL 33135 Phone 305-443-9353

Section VIII - 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 ---

Mechanical (general) ---

Special ---

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 from 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.