

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

This Material Safety Data Sheet is offered pursuant to EN ISO 15011-4, Other government regulations must be reviewed for applicability to these products.

Version:202201

Section 1 - Identification of Products

Manufacturer/Supplier name: Wuhan Sunny Industry & Trade Co.,Ltd

Address: 1282 jiefang avenue,Wuhan,China Post code:430010

Telephone number: 86-27-82726189

EMERGENCY TELEPHONE NUMBERS IN WESTERN EUROPE:

Anti-poison Center : INRS/ORFILA (France) : +33 (0) 1 45 42 59 59

Anti-poison Centre (Spain) : +34 91 562 04 20

Anti-poison Centre (United Kingdom) : +44 870 600 6266

Anti-poison Centre (Germany) +49 (0) 761 19240

Product type: Aluminum Wire for GMAW, GTAW

Trade name: HBW1100,HBW4043,HBW4047,HBW5183,HBW5356,HBW5554

AWS classification: AWS A5.10 ER1100,ER4043,ER4047,ER5183,ER5356,ER5554

Section II - Hazardous Components/Identity Information

Components	CAS No.	TLV(mg/m3)
Aluminum (Al)	7429-90-5	10 (dust) 5 (Resp)
Chromium (Cr)	7440-47-3	0.5 (metal)
Copper (Cu)	7440-50-8	1 (dust) 0.2 (fume)
Iron (Fe) (limits as oxide fume)	7439-89-6	5
Magnesium (Mg)	7439-95-4	10
Manganese (Mn) (limits as fume)	7439-96-5	0.2
Silicon (Si)	7440-21-3	10
Beryllium (Be)	7440-41-7	0.002 (TWA)
Titanium (Ti) Oxide dust	7440-32-6	10
Vanadium (V) Respirable dust	7440-62-2	0.5 as V2O5
Zinc (Zn) Fume	7440-66-6	5

Classification of the substance or mixture :

Regulation 2015/830:The product is not classified

Label elements:

Not classified as dangerous product. EC 1272/2008 (CLP)The product do not require labeling

Other hazards

Skin contact is normally no hazard but should be avoided to prevent possible allergic reactions. Persons with a pacemaker should not go near welding or cutting operations until they have consulted their doctor and obtained information from the manufacturer of the device.

When this product is used in a welding process, the most important hazards are welding fumes, heat, radiation and electric shock. Fumes: Overexposure to welding fumes may result in symptoms like metal fume fever, dizziness, nausea, dryness or irritation of the nose, throat or eyes. Chronic overexposure to welding fumes may affect pulmonary function. Prolonged inhalation of chromium compounds above safe exposure limits can cause cancer. Overexposure to manganese and manganese compounds above safe exposure limits can cause irreversible damage to the central nervous system, including the brain, symptoms of which may include slurred speech, lethargy, tremor, muscular weakness, disturbances and spastic gait.

Heat: Spatter and melting metal can cause burn injuries and start fires.

Radiation: Arc rays can severely damage eyes or skin. Electricity: Electric shock can kill.

Other Emergency Overview: Metal wire or rods in varying colours. This product is normally not considered hazardous as shipped. Gloves should be worn when handling to prevent cuts and abrasions.

Section 3 - Composition and Information on Ingredients

Typical figures

Code	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Other	Al
1100	0.95	1.2	0.1	0.05	-	-	0.1	-	0.15	Bal
4043	4.5-6	0.8	0.3	0.05	0.05	-	0.1	0.2	0.15	Bal
4047	11-13	0.8	0.3	0.15	0.1	-	0.2	-	0.15	Bal
5356	0.25	0.4	0.1	0.05- 0.2	4.5- 5.5	0.05- 0.2	0.1	0.06- 0.2	0.15	Bal
5554	0.25	0.4	0.1	0.5- 1.0	2.4-3	0.05- 0.2	0.25	0.05- 0.2	0.15	Bal

Section 4 - Property Physical/Chemical characteristics

Boiling point	N/A	Specific gravity(H ₂ O=1)	N/A
Vapor pressure(mm Hg)	N/A		
Vapor density(AIR=1)	N/A	Evaporation rate(Butyl acetate=1)	N/A

Solubility in water N/A

Odor and Appearance: solid aluminum wire or rod, odorless.

Section 5 - First Aid Measures

Route(s) of entry: inhalation,skin,ingestion

Emergency Overview – product as shipped consists of a solid silvery metallic wire or rods which are non-reactive, nonflammable and has no immediate health hazard. In fire product can produce metal oxides fumes and personal protective equipment may be required. INHALATION may be the most common cause of overexposure due to the welding fumes. Large amounts of welding fumes will cause irritation of the nose, eyes and skin 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 6 - Fire Fighting Measures

Flash point (method used) N/A	Flammable limits N/A	LEL N/A	UEL N/A
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Nonflammable, however welding arcs and sparks can ignite combustible and flammable products. Ref. Z49.1, NFPA 51B. Only the packaging material will burn.

Fire/explosion: May be a potential hazard under the following conditions:

Molten aluminum in contact with water/moisture or other metal oxides (e.g., rust). Moisture entrapped by molten aluminum can be explosive. Contact of molten aluminum with other metal oxides can initiate a thermite reaction.

Extinguishing media: Use fire fighting methods and materials that are appropriate for surrounding fire. Use coarse water spray on chips or turnings. For fines, dust or molten aluminum, use Class D extinguishing agents.

DO NOT USE: Halogenated extinguishing agents on small chips/fines. Do not use water in fighting fires around molten aluminum.

Fire fighting instructions: Fire fighters should wear approved, positive pressure, self-contained breathing apparatus and full protective clothing when appropriate.

Section 7 - Accidental Release Measures

Spill and leak response: These products are solid metal rods, with no spill or leak hazards.

Section 8 - Handling and Storage

All employees who handle these products should be trained to handle it safely. Use in a well-ventilated location. Avoid breathing fumes of these products during welding operations. Open containers on a stable surface. Packages of these products must be properly labeled.

Store packages in a cool, dry location. Storage in an atmosphere that is wet, moist, or highly humid may lead to corrosion of these products. Store away from incompatible materials (see Section 9, Stability and Reactivity).

Section 9 - Stability and Reactivity Data

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

Incompatibility (Metals to avoid) None

Hazardous decomposition products

This product with normal and proper storage will be stable. During welding, Brazing and processing may form fumes, dust and gas decomposition. Avoid extreme temperatures and incompatible materials such as some of the flowing; Strong Acids, strong bases, strong oxidizers, metal oxides, alcohols, hydrocarbons and halogens. As always welding items shall be stored in a cool low humid location and kept dry. During all operations do not eat or drink while handling and ensure proper ventilation when welding, brazing or processing. Ensure that all Federal Occupational Safety and Health guidelines are followed as well as well as your company's safety guidelines. Read and understand ANSI Z49.1. As always welding items shall be stored in a cool low humid location and kept dry. During all operations do not eat or drink while handling and ensure proper ventilation when welding, brazing or processing. Ensure that all Federal Occupational Safety and Health guidelines are followed as well as well as your Company's safety guidelines. Read and understand ANSI Z49.1.

Section 10 - Control of Individual Protection

Respiratory measures

Use respirable fume respirator or air supplier respirator when welding in a confined space or where local exhaust or ventilation does not keep the exposure below TLV. Where respiratory protection is necessary, NIOSH approved respiratory protection should be used. A NIOSH approved Type TC-21-C mask is recommended.

Ventilation

Use enough ventilation, local exhaust at the arc, or both to keep exposure within legal limits. In the worker's breathing zone and the general area, the fumes and gases must be kept the TLVs and the equivalent exposure must compute to less than one. Train welders to keep their heads out of the 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.

Section 11 - Considerations of Disposal

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,FL33135 Phone 305-443-9353

Section 12 - Information of Transportation

This material is NOT hazardous.

Proper shipping name: NOT applicable

Hazard class number and description: NOT applicable

UN Identification number: NOT applicable

Packing group:NOT applicable

DOT labels required:NOT applicable

Section 13 - Ecological Information

All work practices must be aimed at eliminating environmental contamination.

Welding consumables and materials could degrade/weather into components originating from the consumables or from the materials used in the welding process. Avoid exposure to conditions that could lead to accumulation in soils or groundwater.

Section 14 - Toxicologiques Information

Inhalation of welding fumes and gases can be dangerous to your health. Classification of welding fumes is difficult because of varying base materials, coatings, air contamination and processes. The International Agency for Research on Cancer has classified welding fumes as possibly carcinogenic to humans.

Acute toxicity: Overexposure to welding fumes may result in symptoms like metal fume fever, dizziness, nausea, dryness or irritation of the nose, throat or eyes.

Chronic toxicity: Overexposure to welding fumes may affect pulmonary function. Overexposure to manganese and manganese compounds above safe exposure limits can cause irreversible damage to the central nervous system, including the brain, symptoms of which may include slurred speech, lethargy, tremor, muscular weakness, psychological disturbances and spastic gait.

Section 15 - Regulatory Information

Read and understand the manufacturer's instructions, your employer's safety practices and the health and safety instructions on the label. Observe any federal and local regulations. Take precautions when welding and protect yourself and others.

Welding fumes and gases are hazardous to your health and may damage lungs and other organs. Use adequate ventilation. electric shock can kill.

ARC rays and sparks can injure eyes and burn skin. Wear correct hand, head, eye and body protection.

U.S. Federal Regulations

TSCA STATUS: All components of this product are listed on the TSCA inventory.

CERCLA HAZARDOUS SUBSTANCES: Beryllium, Chromium, Chromium compounds, Copper, Lead, Manganese, Nickel, Zinc.

SARA TITLE III: Section 311/312 Physical and Health Hazard Categories: Immediate (acute), delayed (chronic) if particulates/fumes are generated during processing. Section 313 Toxic Chemicals: Aluminum (fume/dust), Beryllium, Chromium, Copper, Lead, Manganese, Nickel, Vanadium (fume/dust), and Zinc (fume/dust).

International Regulations

EUROPEAN COMMUNITY: All components of this product are listed on ECHOIN, the European Core Inventory.

Section 16 - Other Information

This Material Safety Data Sheet is offered pursuant to OSHA's Hazard Communication Standard (29 CFR 1910.1200). Other government regulations must be reviewed for applicability to these products. The information contained herein relates only to the specific product. If the product is combined with other materials, all component properties must be considered. To the best of the Sunny Industry & Trade Co.,Ltd's knowledge, the information and recommendations contained in this publication are reliable and accurate as of the date of issue. However, accuracy, suitability, or completeness are not guaranteed, and no warranty, guarantee, or representation, expressed or implied, is made by Sunny Industry & Trade Co.,Ltd. as to the absolute correctness or sufficiency of any representation contained in this and other publications Sunny Industry Group assumes no responsibility in connection therewith; nor can it be assumed that all acceptable safety measures may not be required under particular or exceptional conditions or circumstances.

Data may be changed from time to time. Be sure to consult the latest edition.

Sunny Industry & Trade Co.,Ltd requests the users of these products to study this Material Safety Data Sheet(MSDS) and become aware of product hazards and safety information. To promote safe use of these products a user should:

notify its employees, agents and contractors of the information on this MSDS and any product hazards/safety information.

furnish this same information to each of its customers for these products.
request such customers to notify employees and customers for the same product hazards and safety information.