SAFETY DATA SHEET

This Safety Data Sheet complies with Regulation (EC) No 1907/2006, ISO 11014-1 and ANSI Z400.1

1. Product and Company Identification

Production Name HTW-50 (ER70S-6)
Classification(s): EN 13479, EN ISO 14341-A:G 42 2 C1/ G 42 4 M21 3Si1
Application Solid Wire for Gas Shielding Arc Welding
Supplier HIT Welding Industry Co., Ltd.
7 Industrial Rd., Yaoguan Town, Changzhou, China
Tel: +86-519-88711090 Website: www.htw.cn

2. Hazards Identification

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.
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 heat, radiation, electric shock and welding fumes.
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.
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. 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.

3. Composition/Information on Ingredients

This product is a continuous solid metal wire , and it is not hazardous.

Substance	Weight %	CAS#	EINESC#	ELINCS#
Iron	>90	7439-89-6	231-096-4	-
Manganese	<1.6	7439-96-5	231-105-1	-
Silicon	<1	7440-21-3	231-130-8	-
Copper	<0.5	7440-50-8	231-159-6	-
Carbon	<0.1	7440-44-0	231-153-3	-
Phosphorus	<0.05	7723-14-0	231-768-7	015-002-00-7
Sulfur	<0.05	7704-34-9	231-722-6	-
Chromium	<0.05	7440-47-3	231-157-5	-
Nickel	<0.05	7440-02-0	231-111-4	028-002-00-7

4. FIRST AID MEASURES

Inhalation: If breathing has stopped, perform artificial respiration and obtain medical assistance immediately! If breathing is difficult, provide fresh air and call physician.

Eye contact: For radiation burns due to arc flash, see physician. To remove dusts or fumes flush with water for at least fifteen minutes. If irritation persists, obtain medical assistance.

Skin contact: For skin burns from arc radiation, promptly flush with cold water. Get medical attention for burns or irritations that persist. To remove dust or particles wash with mild soap and water.

Electric shock: Disconnect and turn off the power. Use a nonconductive material to pull victim away from contact with live parts or wires. If not breathing, begin artificial respiration, preferably mouth-to-mouth. If no detectable pulse, begin Cardio Pulmonary Resuscitation (CPR). Immediately call a physician.

General: Move to fresh air and call for medical aid.

5. FIRE FIGHTING MEASURES

No specific recommendations for welding consumables. Welding arcs and sparks can ignite combustible and lammable materials. Use the extinguishing media recommended for the burning materials and fire situation. Wear self-contained breathing apparatus as fumes or vapors may be harmful.

6. ACCIDENTAL RELEASE MEASURES

Solid objects may be picked up and placed into a container. Liquids or pastes should be scooped up and placed into a container. Wear proper protective equipment while handling these materials. Do not discard as refuse.
Personal precautions: refer to section 8
Environmental precautions: refer to section 13

7. HANDLING AND STORAGE

Handling: Handle with care to avoid stings and cuts. Wear gloves when handling welding consumables. Avoid exposure to dust. Do not ingest. Some individuals can develop an allergic reaction to certain materials. Retain all warning and identity labels. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
Storage: Store in dry protected location to prevent any moisture contact.Keep separate from chemical substances like acids and strong bases, which could cause chemical reactions.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Avoid exposure to welding fumes, radiation, spatter, electric shock, heated materials and dust.
*Engineering measures:*Ensure sufficient ventilation, local exhaust, or both, to keep welding fumes and gases from breathing zone and general area. Keep working place and protective clothing clean and dry. Train welders to avoid contact with live electrical parts and insulate conductive parts. Check condition of protective clothing and equipment on a regular basis.
Personal protective equipment: Use respirator or air supplied respirator when welding or brazing in a confined space, or where local exhaust or ventilation is not sufficient to keep exposure values within safe limits. Use special care when welding painted or coated steels since hazardous substances from the coating may be emitted. Wear hand, head, eyes, ear and body protection like welders gloves, helmet or face shield with filter lens, safety boots, apron, arm and shoulder protection. Keep protective clothing clean and dry.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Status	Solid	*Appearance*	Copper color
Melting point	>1000 ° C	*Solubility in water*	Insoluble.

10. STABILITY AND REACTIVITY

General: This product is only intended for normal welding purposes.
Stability: This product is stable under normal conditions.
Reactivity: Contact with chemical substances like acids or strong bases could cause generation of gas.
When this product is used in a welding process, hazardous decomposition products would include those from the volatilization, reaction or oxidation of the materials listed in section 2 and those from the base metal and coating. The amount of fumes generated from this product varies with welding parameters and dimensions, but is generally no more than 5 to 10g/kg consumable. Fumes from this product contain compounds of the following chemical elements. The rest is not analyzed, according to available standards.

Fume analysis:	Fe	Mn	Cr	Pb	Cu	Ni
weight % less than	66	14	0.1	0.2	0.6	0.1

Reasonably expected gaseous products would include carbon oxides, nitrogen oxides and ozone. Air contaminants around the welding area can be affected by the welding process and influence the composition and quantity of fumes and gases produced.

11. TOXICOLOGICAL 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 (Group 2B).
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.

12. ECOLOGICAL INFORMATION

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.

13. DISPOSAL CONSIDERATIONS

Discard any product, residue, disposable container or liner in an environmentally acceptable manner, in full compliance with federal and local regulations. Use recycling procedures if available.
USA RCRA: This product is not considered hazardous waste if discarded.
Residues from welding consumables and processes could degrade and accumulate in soils and groundwater.

14. TRANSPORT INFORMATION

No international regulations or restrictions are applicable.

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. *WARNING:* 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.

16. OTHER INFORMATION

All national/local prescriptions remain applicable. The data given in this sheet relate to the unused product, unless specified otherwise. During usage dangerous products can be formed (welding fume, radiation,etc.). *HIT* requests the users of this product to study this Safety Data Sheet (SDS) and become aware of product hazards and safety information. To promote safe use of this product, a user should: Notify its employees, agents and contractors of the information on this SDS and any product hazards/safety information; Furnish this same information to each of its customers for the product. Request such customers to notify employees and customers for the same product hazardsand safety information.
DISCLAIMER OF LIABILITY: The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, *HIT* does not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal or the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

For more information, please contact *HIT* detailed as section 1.