

# Safety Data Sheet

## NICKEL & NICKEL ALLOYS SAFETY DATA SHEET

### Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1 Product name: NICKEL & NICKEL ALLOYS BARE WIRE

Product Identification: ERNiCu-7

Product Specification: AWS A5.14

relevant identified uses of the substance or mixture and uses advised against

1.2.1 relevant identified uses: for welding consumables and related products.

1.3 supplier Wisdom Heating Alloy (Shanghai) Co.,Ltd

### Section 2: Hazards identification

2.1 classification of the mixture: The product is placed on the market in solid form

2.1.1 classification in accordance with GHS-US

Skin sens.1 H317

Carc.1B H350

STOT RE 1 H372

Aquatic Acute 1 H400

Aquatic Chronic H412

2.2 Label elements:

GHS-US labelling

Hazard pictograms(GHS-US):



GHS07



GHS08



GHS09

Signal word(GHS-US)

:Danger

: H317 - May cause an allergic skin reaction

: H350 - May cause cancer

:H372 - Causes damage to organs through prolonged or repeated exposure

:H400 - Very toxic to aquatic life

:H412 - Harmful to aquatic life with long lasting effects

Precautionary Precautionary

P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P260 - Do not breathe dust/fume/gas/mist/vapours/spray

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray

# Safety Data Sheet

- P264 - Wash thoroughly after handling
- P270 - Do not eat, drink or smoke when using this product
- P272 - Contaminated work clothing should not be allowed out of the workplace
- P273 - Avoid release to the environment
- P280 - Wear protective gloves/protective clothing/eye protection/face protection
- P302+P352 - IF ON SKIN: Wash with plenty of soap and water
- P308+P313 - IF exposed or concerned: Get medical advice/attention
- P314 - Get medical advice and attention if you feel unwell
- P321 - Specific treatment (see label)
- P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
- P362+P364 - Take off contaminated clothing and wash it before reuse
- P391 - Collect spillage
- P405 - Store locked up
- P501 - Dispose of contents/container in accordance with local/regional/national/International regulations

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

- 3.1 Substances: No data available  
Full text of H-phrases: see section 11
- 3.2 Mixtures: The mixture contains dangerous substances:

Substance name	Abbreviation	% Percent	GHS-US classification
Nickel	Ni	62-69	Skin Sense. 1, H317 Carc.1B, H350 STORT RE 1, H372
Copper	Cu	rest	Not classified
Chromium	Cr	18-22	Not classified
Molybdenum	Mo		Not classified
Iron	Fe	≤2.5	Acute Tox. 4 (Oral), H302
Phosphorus	P	≤0.02	Not classified
Manganese	Mn	≤4.0	Not classified
Silicon	Si	≤1.25	Not classified
Sulphur	S	≤0.015	Not classified
Carbon	C	≤0.15	Not classified
Aluminum	Al	≤1.25	Not classified

# Safety Data Sheet

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures:

- First-aid measures after inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
- Get medical attention.
- First-aid measures after skin contact: Flush with water for at least 15 minutes. Seek medical attention if irritation develops or persists.
- First-aid measures after eye contact: Immediately flush eyes with water and continue washing for at least 15 minutes. Obtain medical attention if discomfort persists.
- First-aid measures after ingestion: Do NOT induce vomiting. Get immediate medical attention

### 4.2. Most important symptoms and effects, both acute and delayed:

- Symptoms/injuries after inhalation: Short-term (acute) overexposure to the gases, fumes, and dusts may include irritation of
- the eyes, lungs, nose, and throat. Some toxic gases associated with welding may cause pulmonary edema, asphyxiation, and death.
- Acute overexposure may include signs and symptoms such as watery eyes, nose and throat irritation, headache, dizziness,
- difficulty in breathing, frequent coughing, or chest pain. The presence of chromium/chromate in fume can cause irritation of nasal
- membranes and skin. The presence of nickel compounds in fume can cause metallic taste, nausea, tightness of chest, fever, and
- allergic reaction. Excessive inhalation or ingestion of manganese can produce manganese poisoning. Overexposure to manganese
- compounds may affect the central nervous system, symptoms of which are languor, sleepiness, muscular weakness, emotional
- disturbances, and spastic gait resembling Parkinsonism. These symptoms can become progressive and permanent if not treated.
- Excessive inhalation of fumes may cause "Metal Fume Fever" with Flu-like symptoms such as chills, fever, body aches, vomiting,
- sweating, etc.
- Symptoms/injuries after skin contact: Dusts may cause irritation.
- Symptoms/injuries after eye contact: Causes eye irritation.
- Symptoms/injuries after ingestion: Not an anticipated route of exposure during normal
- product handling. May be harmful if ingested.

### 4.3 Indication of any immediate medical attention and special treatment needed:

No data available.

## SECTION: 5 FIREFIGHTING MEASURES

# Safety Data Sheet

## 5.1 Extinguishing media:

Suitable extinguishing media: Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media: No data available.

## 5.2 Special hazards arising from the substance or mixture: Fire may produce irritating or poisonous gases.

Fire hazard: Not flammable

Explosion hazard: None known

## 5.3 Advice for firefighters: In the event of fire, wear self-contained breathing apparatus and full protective gear.

## SECTION: 6 ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel: Wear appropriate personal protective equipment as specified in Section 8. Ensure adequate ventilation.

For emergency responders: No data available.

### 6.2 Environmental precautions: Avoid release into the environment. Avoid dispersal of spilled material and contact with soil, ground and surface water drains and sewers.

### 6.3 Methods and material for containment and cleaning up: Take up mechanically. Collect the material in labeled containers and dispose of according to local and regional authority requirements.

### 6.4 Reference to other sections: See Section 7 for information of safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

## SECTION: 7 HANDLING AND STORAGE

### 7.1 Precautions and safe handling: Welding may produce dust, fumes and gases hazardous to health. Avoid breathing dust, fumes and gases.

Use adequate ventilation. Keep away from sources of ignition. Avoid contact with skin, eyes and clothing. Do not eat, drink and smoke in workareas.

### 7.2 Conditions for safe storage, including and incompatibilities: Store in cool, dry and well-ventilated place. Keep away from incompatible

### 7.3 Specific end use(s): For welding consumables and related products.

## SECTION: 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Appropriate engineering controls: Local exhaust and general ventilation must be adequate to meet exposure standards.

- ◆ Hand protection: Wear welding gloves.
- ◆ Eye protection: Wear helmet or face shield with filter lens of appropriate shade number. See ANSI/ASC Z49.1 Section 4.2. Provide protective screens and flash

# Safety Data Sheet

goggles, if necessary, to shield others.

- ◆ **Skin and body protection:** Wear head and body protection, which help to prevent injury from radiation, sparks, flame and electrical shock.
  - ◆ See ANSI Z49.1. At a minimum this includes welder’s gloves and a protective face shield, and may include arm protectors, aprons, hats,
  - ◆ **shoulder protection**, as well as dark substantial clothing. Train the employee not to touch live electrical parts and to insulate him/herself from
  - ◆ **work and ground.** Welders should not wear short sleeve shirts or shortpants
- Respiratory protection:** If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn.

## SECTION 9: DISPOSAL CONSIDERATIONS

9.1 Waste treatment methods: Dispose of in accordance with local and national regulations.

Waste disposal recommendations: Dispose of contents/container in accordance with local/regional/national/international regulations

## SECTION 10: TRANSPORT INFORMATION

In accordance with DOT / ADR / RID / ADNR / IMDG / ICAO / IATA

10.1 UN Number: Not a dangerous good in sense of transport regulations

10.2 UN proper shipping name: Not applicable

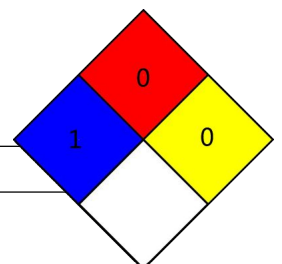
## SECTION 11: OTHER INFORMATION

Full text of H-phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Carc. 1B	Carcinogenicity, Category 1B
Skin Sens. 1	Sensitisation — Skin, category 1
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1
H302	Harmful if swallowed
H317	May cause an allergic skin reaction
H350	May cause cancer
H372	Causes damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H412	Harmful to aquatic life with long lasting effects.

**NFPA health hazard:** 1- Exposure could cause irritation but only minor residual injury even if no treatment is given.

**NFPA fire hazard:** 0- Materials that will not burn.





# Safety Data Sheet

**NFPA reactivity:**           **0- Normally stable, even under fire exposure conditions, and are not reactive with water.**

**HMIS III Rating**

**Health:**                   **2 Moderate Hazard - Temporary or minor injury may occur**

**Flammability:**       **0 Minimal Hazard**

**Physical:**               **0 Minimal Hazard**

We believe that the information contained herein is believed to be true and accurate as of the date of this SDS. All statements or suggestions are made without any warranty, expressed or implied, regarding the accuracy of the information, the hazard connected with the use of this material or the results to be obtained for use thereof. As the condition or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of this material. It is the user's obligation to determine the conditions of safe use of these products. All chemical products can in fact present unknown risks to health, safety and / or the environment, even in relation to the different operating conditions, and they must therefore be used with care. For this reason we cannot guarantee that the risk described in this form are the only foreseeable risks. The user must therefore satisfy himself as to the particular conditions under which it is intended to be use in. Moreover, it must be noted that the user is obliged to comply with all the legislative, administrative and regulatory provisions regarding the product and its use in terms of occupational hygiene and safety, and environmental protection, apart from the information given in the form, given purely as guidance.

**Technical Department**