

MATERIAL SAFETY DATA SHEET

REF: MSDS10 ISSUE 1 DATE: 18.2.09

ZINC GALVANISED MILD STEEL WIRECLOTH

1. PRODUCT AND COMPANY IDENTIFICATION

Product	Zinc Galvanised Mild Steel Wirecloth
Manufacturer/Supplier	United Wire Granton Park Avenue Edinburgh EH5 1HT
Telephone Number	0131 552 6241
Fax Number	0131 552 8462
Web Address	http://www.unitedwire.com/
Contact	QA Dept

2. COMPOSITION / INFORMATION ON INGREDIENTS

	%
Iron Oxide (Fe ₂ O ₃)	97
Zinc (Zn)	1 - 3
Manganese (Mn)	>1.0
Nickel (Ni)	>0.1

3. HAZARD IDENTIFICATION

Steel products in their solid state present no inhalation or ingestion hazard. When the product is heated to high temperatures, e.g. during welding, burning, flame cutting or grinding it may emit hazardous fumes which can be irritant and which may cause metal fume fever. Repeated contact with the metal itself or protect coatings which may be present on the cloth may cause skin problems.



4. FIRST AID MEASURES

Inhalation

From the effects of inhaling fumes:

Take person to fresh air and seek immediate medical attention.

Not applicable to wirecloth in the form supplied.

Skin & Eye Contact

For cuts from steel edges:

Treat as any other cuts; if required seek medical attention

In the event of physical injury to the eyes seek immediate medical attention.

Ingestion

Not applicable to wirecloth in the form supplied.

5. FIRE FIGHTING MEASURES

Extinguishing Media

Not combustible

Special Hazards of Products

This product may give rise to irritant fumes in a fire. See item hazards identified in section 3 above

Protective Equipment for Firefighting

Wear self contained breathing apparatus

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Not applicable

Environmental Precautions

Not applicable

Spillages

Not applicable



7. HANDLING AND STORAGE

Under normal circumstances the materials do not produce any hazardous products and as such do not require any special precautions in storage. The transient handling of the materials would not be expected to produce any sensitisation, however all materials may carry a thin film of oil lubricant; it is therefore recommended that gloves are used for handling. Hands should be washed with soap and water before eating, drinking or smoking. The normal precautions for handling heavy metallic objects with possible sharp edges should also be observed.

Some products may be secured by bands or straps, which should not be used to lift the product. As these traps and bands are under tension, they can injure people's eyes or other body parts when that tension is released.

All products are likely to have sharp edges, which could cause lacerations.

Workers should wear suitable protective clothing and equipment such as hand and eye protection.

Storage – When stocking ensure that storage racks and or shelving is suitable for the size and weight of the products being stored.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS (EH40:2005)

Exposure Limits			
Component	Limit	8hr TWA mg/m ³	15 min TWA mg/m ³
Manganese Fume	WEL	0.5	---
Iron Oxide, Fume	WEL	5	10
Zinc Oxide Fume	Guidance	2	10
Nickel	WEL	0.5	---

Engineering Control Measures

Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure, mechanical ventilation (dilution and local exhaust) and control of process conditions.

Respiratory Protection

Where necessary and there is a risk of inhaling fumes a suitable respirator should be worn. A P2 dust/fume mask or a respirator fitted with P2 filters (to EN149 FFP2S) may be appropriate depending on exposure.



Hand Protection	Heat resistant gloves when carrying out hot work. Cut-resistant gloves should be worn when handling the product and there are sharp edges. When working with products coated with oil then suitable PPE which prevents direct skin contact should be worn.
Eye Protection	Welding visor / goggles when carrying out hot work and grinding when there is a potential for dust generation.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Solid; metallic grey ranging from dull to bright polished
Odour	: Odourless
Water Solubility	: Insoluble
Melting Point	: The zinc coating is 419° to 450°C The steel is 1450°C to 1520°C
Density	: 7.9kg/dm ³

10. STABILITY AND REACTIVITY

The product is stable under normal conditions but when subjected to elevated temperatures (welding & burning) fumes are produced. May react with strong acids to release gaseous acid decomposition products e.g. hydrogen and oxides of nitrogen.

11. TOXICOLOGICAL INFORMATION

Mechanical working such as dry grinding and machining will produce dust of the same composition as the base metal.

The principal mode of entry into the body is by inhalation and if airborne concentrations are excessive (see EH40) over long periods of time they may have a long term effect on the health of the worker, primarily affecting the lungs. Nickel is a known respiratory sensitiser. Occupational asthma due to respiratory sensitisation to nickel salts has been recorded in the electroplating, metal polishing, catalyst reprocessing and stainless steel welding industries. Metallic nickel and its salts are potent skin sensitisers.

During welding burning and other process which are at high temperature fumes containing oxides of zinc, manganese and iron, and also the breakdown products of any other coating that may be present will be released.

The potential effects on health include metal fume fever a short-lasting, self limiting condition with symptoms similar to influenza.



12. ECOLOGICAL INFORMATION

No known harmful effects.

13. DISPOSAL CONSIDERATIONS

Recycle (steel is 100% recyclable). Should waste disposal be deemed necessary follow national or regional regulations which may be in force?

14. TRANSPORT INFORMATION

No special precautions.

15. REGULATORY INFORMATION

Coated steel products are articles not substances and, as such, not subject to the Chemicals (Hazard Information and Packaging) Regulations.

All products covered by this data sheet comply with the Packaging & Packaging Waste EC Directive 94/62/EEC on heavy metal content.

16. OTHER INFORMATION

HSE Guidance Notes:

EH26: Occupational Skin diseases –Health & Safety Precautions

EH40: Workplace Exposure Limits – Current Edition

EH42: Monitoring Strategies for Toxic Substances

EH54: Assessment of Exposure to Fume from Welding and Allied Processes

EH55: The Control of Exposure to Fume from Welding, Brazing and Similar Processes

The information given in this safety data sheet is based on the present level of our knowledge and experience. The data sheet describes the products with respect to safety requirements. This information does not constitute an assessment under the Control of Substances Hazardous to Health Regulations 2002.

We have revised this data sheet in line with the CHIP 3 Regulations.