

# Zirconium Nickel Alloy Powder



## Section 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

|               |                               |
|---------------|-------------------------------|
| Product name: | Zirconium Nickel Alloy Powder |
| CAS Number:   | 11146-73-9                    |
| EC Number:    | 231-111-4                     |

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended use: Laboratory chemicals, Industrial & for professional use only

### 1.3 Details of the supplier of the safety data sheet

|                      |   |
|----------------------|---|
| <b>Company name:</b> | East Harbour Group Ltd<br>Miranda House, The Quay<br>Harwich, Essex, CO12 3HH<br>United Kingdom |
| <b>Telephone:</b>    | +44 (0) 333 242 0100  |
| <b>Email:</b>        | <a href="mailto:info@eastharbourgroup.com">info@eastharbourgroup.com</a>                        |

### 1.4 Emergency telephone number

|                             |               |
|-----------------------------|---------------|
| <b>Emergency telephone:</b> | 0800 246 1274 |
|-----------------------------|---------------|

## Section 2: Hazardous identification

### 2.1 Classification of the substance or mixture

Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS)

|                              |  |
|------------------------------|--|
| GHS08                        | Health Hazard  |
| Carc. 2                      | H351 suspected of causing cancer   |
| STOT RE 1                    | H372 Causes damage to the lung, the kidneys, and the liver through prolonged or repeated exposure. Route of exposure: Inhalation |
| GHS07                        |  |
| Skin Sens. 1                 | H317 May cause an allergic skin reaction.  |
| Hazards not other classified | No information known   |

### 2.2 Label elements

The product is classified and labelled in accordance with 29 CFR 1910 (OSHA HCS)



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## Pictograms



GHS07 GHS08

**Signal word**

Danger

**Hazard Statements**

H317

May cause an allergic skin reaction

H351

Suspected of causing cancer

H372

Causes damage to the lung, the kidneys, and the liver through prolonged or repeated exposure. Route of exposure: Inhalation

**Precautionary Statements**

P260

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

P261

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

P280

Wear protective gloves/protective clothing/eye protection/face protection

P363

Was contaminated clothing before reuse

P405

Store locked up

P501

Dispose of contents/container in accordance with local/ regional/ national/ international regulations

**WHMIS classification**

D2A

Very toxic material causing other toxic effects

**Classification system****HMIS ratings (scale 0-4)**

Health (acute effects)

=1

Flammability

=0

Physical Hazard

=0

**2.3 Other hazards**

Results of PBT and vPvB assessment

PBT

Not applicable

vPvB

Not applicable

## Section 3: Composition/information on ingredients

Chemical characterisation:

Substances

CAS# Description:

7440-67-7 Zirconium

Identification number(s):

EC number 231-176-9

CAS# Description:

7440-02-0 Nickel

Identification number(s):

EC number 231-111-4

## Section 4: First aid measures

**4.1 Description of first aid measures**

General information

No special measures required.



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|                    |  |
|--------------------|--|
| After inhalation   | Seek medical treatment in case of complaints.  |
| After skin contact | Generally the product does not irritate the skin   |
| After eye contact  | Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor. |
| After swallowing   | If symptoms persist consult doctor.  |

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

No further relevant information available

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

No further relevant information available

## Section 5: Fire-fighting measures

### 5.1 Fire Fighting Media and Instructions:

Suitable extinguishing media: Special powder for metal fires. Do not use water

Unsuitable extinguishing media: water

### 5.2 Special hazards arising from the substance or mixture

If this product is involved in a fire, the following can be released:

Zirconium Oxide

Nickel/Nickel Oxides

### 5.3 Advice for firefighters

Special protective equipment: No special measures required

## Section 6: Accidental release measures

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

Not required

### 6.2 Environmental precautions

Do not allow material to be released to the environment without proper governmental permits.

Do not allow product to reach sewage system or any water course.

Do not allow to penetrate the ground/soil

### 6.3 Methods and material for containment and cleaning up

Pick up mechanically.

Prevention of secondary hazards: No special measures required

### Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment

See Section 13 for disposal information



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## Section 7: Handling and storage

### 7.1 Precautions for safe handling

Keep container tightly sealed.

Store in cool, dry place in tightly closed containers.

Information about protection against explosions and fires:

No special measures required.

### 7.2 Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles:

No special requirements

Information about storage in one common storage facility:

No information known

Further information about storage conditions:

Keep container tightly sealed

Store in cool, dry conditions in well-sealed containers

Specific end use(s)

No further relevant information available

## Section 8: Exposure controls/personal protection

### 8.1 Control parameters

### 8.2 Exposure controls /

#### Appropriate engineering controls

General protective and hygienic measures

The usual precautionary measures for handling chemicals should be followed

Maintain an ergonomically appropriate working environment

### 8.3 Personal protective equipment

Breathing equipment

Not required

Protection of hands

Not required

Penetration time of glove materials

Not determined

Eye protection

Safety glasses

Body protection

Protective work clothing

## Section 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

**Appearance**

Form: Solid in various forms

**Odour**

Odourless

**Odour Threshold**

Not determined

**pH**

Not applicable

**Melting Point/Range**

Not determined

**Boiling Point/Range**

Not determined

**Sublimation temperature/start**

Not determined



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|  |  |
|--|--|
| <b>Flammability (solid, gas)</b>               | Not determined                                     |
| <b>Ignition temperature</b>                    | Not determined                                     |
| <b>Decomposition temperature</b>               | Not determined                                     |
| <b>Auto igniting</b>                           | Not determined                                     |
| <b>Danger of explosion</b>                     | Not determined                                     |
| <b>Explosion Limits Upper/Lower</b>            | Upper: Not determined. Lower: Not determined       |
| <b>Vapour Pressure</b>                         | Not applicable                                     |
| <b>Vapour Density</b>                          | Not applicable                                     |
| <b>Evaporation rate</b>                        | Not applicable                                     |
| <b>Partition Coefficient (n-octanol/water)</b> | Not determined                                     |
| <b>Viscosity:</b>                              | Dynamic: Not applicable, Kinematic: Not applicable |
| <b>Other information</b>                       |  |
| No further relevant information available      |  |

## Section 10: Stability and Reactivity

|  |   |
|--|---|
| <b>10.1 Reactivity</b>                         | No information known  |
| <b>10.2 Chemical Stability</b>                 | Stable under recommended storage conditions<br>Thermal decomposition/conditions to be avoided:<br>Decomposition will not occur if used and stored according to specifications |
| <b>10.3 Possibility of hazardous reactions</b> | No dangerous reactions known  |
| <b>10.4 Conditions to avoid</b>                | No further relevant information available   |
| <b>10.5 Incompatible materials</b>             | No information known  |

## Section 11: Toxicological Information

|  |  |
|--|--|
| <b>11.1 Toxicological effects:</b>   |  |
| <b>Acute toxicity:</b>   |  |
| The Registry of Toxic Effects of Chemical Substances (RTECS) contains acute toxicity data for this substance<br>LD/LC50 values that are relevant for classification: |  |
| No data  |  |
| <b>Skin irritation or corrosion:</b>   |  |
| Powder: Irritant effect  |  |
| <b>Eye irritation or corrosion:</b>  |  |
| Powder: Irritant effect  |  |
| <b>Sensitisation</b>   |  |
| May cause an allergic skin reaction.   |  |
| <b>Germ cell mutagenicity:</b>   |  |
| The Registry of Toxic Effects of Chemical Substances (RTECS) contains mutation data for this substance.  |  |
| <b>Carcinogenicity:</b>  |  |
| Suspected cause of cancer.   |  |
| IARC-2B: Possibly carcinogenic to humans: Limited evidence in humans in the absence of sufficient evidence in experimental animals.                                  |  |
| The Registry of Toxic Effects of Chemical Substances (RTECS) contains tumorigenic and/or carcinogenic and/or neoplastic data for this substance.                     |  |



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### Reproductive toxicity:

The Registry of Toxic Effects of Chemical Substances (RTECS) contains multiple dose toxicity data for this substance.

### Specific target organ system toxicity – repeated exposure:

Causes damage to the lung, the kidneys, and the liver through prolonged or repeated exposure. Route of exposure: Inhalation.

### Specific target organ system toxicity – single exposure:

No effects known

### Aspiration hazard:

No effects known

### Subacute to chronic toxicity:

The Registry of Toxic Effects of Chemical Substances (RTECS) contains multiple dose toxicity data for this substance.

### Additional toxicological information:

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

## Section 12: Ecological Information

### 12.1 Toxicity

#### Aquatic toxicity

No further relevant information available.

#### Persistence and degradability

No further relevant information available

#### Bioaccumulative potential

No further relevant information available

#### Mobility in soil

No further relevant information available

#### Additional ecological information:

##### General notes:

Do not allow material to be released to the environment without proper governmental permits.

Do not allow undiluted product or large quantities to reach ground water, water course or sewage system

Avoid transfer into the environment.

#### Results of PBT and vPvB assessment

PBT: Not applicable

vPvB: Not applicable

#### Other adverse effects

No further relevant information available

## Section 13: Disposal considerations

### 13.1 Waste treatment methods

#### Recommendation:

Consult local or national regulations to ensure proper disposal

#### Uncleaned packaging:

##### Recommendation:

Disposal must be made according to official regulations.

Recommended cleansing agent: Water, if necessary, with cleansing agent



## Zirconium Nickel Alloy Powder

### Section 14: Transport Information

|                                    |                           |                |
|------------------------------------|---------------------------|----------------|
| UN- Number                         | DOT, ADN, IMDG, IATA      | Not applicable |
| UN proper shipping name            | DOT, ADN, IMDG, IATA      | Not applicable |
| Transport hazard class(es)         | DOT, ADR, ADN, IMDG, IATA | Not applicable |
| Packing group                      | DOT, IMDG, IATA           | Not applicable |
| Environmental hazards              |                           | Not applicable |
| Special precautions for user       |                           | Not applicable |
| Transport / additional information | DOT                       |                |
| Marine Pollutant (DOT)             |                           | No             |
| UN "Model Regulation"              |                           | -              |

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

### Section 15: Regulatory Information

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture – National Regulations

#### 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

### Section 16: Other Information

#### Further information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this Document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.