

# MATERIAL SAFETY DATA SHEET

CONFIRMS TO DIRECTIVE 67/548/EEC and 1999/45/EC  
Version: 1.0 Revision date: 17.3.20

## NAME: SPARXTAR POWDER

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

- 1.1 **Product identifier**  
Trade Name: SPARXTAR Powder
- 1.2 **Relevant identified uses of the substance or mixture and uses advised against**  
Relevant identified use: Artificial snow. For professional use only.  
Uses advised against: Please consult manufacturer.
- 1.3 **Details of the supplier of the material safety data sheet**  
  
Company identification:  
Company: Magic FX B.V.  
Address: Schouwrooij 27  
NL-5281 RE Boxtel  
Tel: +31 (0)411-748100  
E-mail: [info@magicfx.eu](mailto:info@magicfx.eu)  
Web: [www.magicfx.eu](http://www.magicfx.eu)
- 1.4 **In case of emergency (ICE)**  
Telephone: +31 (0)6 5130 3858  
  
CHEMTREC Telephone:  
US: +1 (0)800 424 9300  
International: +1 (0)703 527 3887

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

CLP Regulation (EC) n° 1272/2008:

H252 Self-heating in large quantities; may cause fire.

H260 Releases flammable gases in contact with water which may ignite spontaneously.

Directive 67/548/EEC and 1999/45/EC:

R15 Releases flammable gases in contact with water.

R17 May ignite spontaneously in air.

### 2.2 Safety statements

S7/8 Keep container tightly closed and dry.

S43 In case of fire, use metallic extinguishing powder. Never use water.

### 2.3 Label elements

CLP Regulation (EC) n° 1272/2008:

Code letter:

F

Hazard designation of product: Highly flammable

Warning:



### 2.4 Hazard statements

H250 Catches fire spontaneously if exposed to air

H260 Releases flammable gases in contact with water which may ignite spontaneously.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

### 2.5 Precautionary statements:

P210 Keep away from heat, sparks, open flames, and hot surfaces. No smoking.

P222 Do not allow contact with air.

P223 Keep away from any possible contact with water, because of violent reaction and possible flash fire.

P231+P232 Handle with inert gas. Protect from moisture.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P312 If swallowed, call a poison center or doctor/physician if you feel unwell.

P302+P334 If on skin, immerse in cool water / wrap in wet bandages.

P304+P340 If inhaled, remove victim to fresh air and keep at rest in a position

P305+P351+P338 If in eyes, rinse cautiously with water several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P332+P313 If skin irritation occurs, get medical advice / attention.

### 2.6 Supplemental statements:

EUH014 Reacts violently with water.

**2.7 Hazard description**

WHMIS classification (Workplace Hazard Materials Identification System, ratings scale: 0-4)

 Health (acute effects): 1  
 Flammability: 2  
 Reactivity: 1

Other Hazards:



Result of PBT and vPvB assessment:

PBT: Not applicable.

vPvB: Not applicable.

## SECTION 3: COMPOSITION/INFORMATION OF INGREDIENTS

**3.1 Ingredients**

Identification		Chemical name / Classification			Concentration
CAS:	7440-67-7	<b>Zirconium</b>		ATP CLP100	80 - 97%
EC:	231-176-9	Regulation 1272/2008	Self-heating Spontaneously flammable		
Index:					
REACH:					
CAS:	7440-58-6	<b>Hafnium</b>		ATP CLP100	1 - 4%
EC:	231-166-4	Regulation 1272/2008	Self-heating Spontaneously flammable		
Index:					
REACH:					

Additional information: Zirconium is routinely found with a low level of Hafnium since separation of the two elements is difficult.

Molecular Formula: Zr

Molecular Weight: 91.22

## SECTION 4: FIRST AID MEASURES

**4.1 Description of first aid measures**
**General information**

In all cases, after cleaning, medical advice should be consulted as quickly as possible with the MSDS.

**Inhalation**

Remove victim to fresh air. Restore and/or support breathing as needed. Call poison treatment specialist immediately if large quantities have been inhaled.

**Skin contact**

Wash thoroughly with soap and water. Remove and properly dispose or launder contaminated clothing before wearing it again. Clean material from shoes and equipment.

**Eye contact**

Immediately flush eyes gently and thoroughly, including under the eyelids, with clean running water for 20 minutes.

**Ingestion**

Prolonged or repeated exposure may be irritating to mouth, throat and esophagus. Call poison treatment specialist immediately if large quantities have been ingested.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1 Extinguishing methods

#### Suitable extinguishing methods

Carbon dioxide, dry chemical powder, or alcohol-resistant foam.

#### Unsuitable extinguishing media

Do not use water.

#### Advice for firefighters

Wear appropriate protective equipment and self-contained breathing apparatus (SCBA).

#### Particular risks:

May emit hazardous fumes under fire conditions. Pyrophoric, dangerous when wet.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

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

Wear a self-contained breathing apparatus, rubber boots and gloves, and disposable coveralls. Dispose of coveralls after use. Keep unprotected persons away.

### 6.2 Environmental precautions

Keep spill material away from drains and runoff, ground water and soil. Dike and contain the spill with inert material. Absorb on sand, vermiculite or diatomite. Transfer material to a container for disposal or recovery. Ventilate area and wash spill site after material pickup is complete.

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

Prevent further leakage or spillage if safe to do so. Sweep or shovel material into dry containers. Avoid creating uncontrolled dust.

### 6.4 Reference to other sections

Refer to Section 13 for disposal of product and contaminated materials.

## SECTION 7: HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Do not breathing dust, vapor, mist or gas. Avoid contact with skin and eyes. Avoid prolonged or repeated exposure. Use only in a chemical fume hood. Open and handle container with care. Keep ignition sources away.

### 7.2 Technical recommendations for the prevention of fires and explosions

Handle and store in a tightly closed container (under inert gas) in a dry, well-ventilated place.

### 7.3 Sensitivities

Air, moisture

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

Technical measures for storage

Minimum Temp.: 0 °C

Maximum Temp.: 50 °C

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters Exposure limit values:

Chemical Name	ACGIH TLV (mg/m <sup>3</sup> )	OSHA PEL (mg/m <sup>3</sup> )
Zirconium 7440-67-7	STEL: 10 (mg/m <sup>3</sup> ), STEL: 10 (mg/m <sup>3</sup> ) Zr TWA: 5 (mg/m <sup>3</sup> ), TWA: 5 (mg/m <sup>3</sup> ) Zr	TWA: 5 (mg/m <sup>3</sup> ) Zr (vacated) STEL: 10 (mg/m <sup>3</sup> ), (vacated) STEL: 10 (mg/m <sup>3</sup> ) Zr

### 8.2 Exposure controls



#### 8.2.1 Occupational exposure controls

Install and operate general and/or local exhaust ventilation systems of sufficient power to maintain airborne concentration below the defined or recommended limit.

#### 8.2.2 Respiratory protection

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard. Respirator selection must be based on known or anticipated exposure levels, the hazards of the material, and the safe working limits of the selected respirator.

#### 8.2.3 Hand protection

Non-static gloves when skin abrasion is possible. For hygienic reasons, rubber gloves should not be worn more than 2 hours.

#### 8.2.4 Eye protection

Safety glasses with side shields or goggles when potential exposure exists. Make sure that there is an eyewash facility in your vicinity.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance:	Solid metallic granules, grey
Odour:	None
Melting point:	1852 °C
Boiling point:	4377 °C
Explosive properties:	Not applicable
Relative density:	6.506 g/cm <sup>3</sup>
Water solubility:	Insoluble.
Flammability (solid, gaseous):	Contact with water liberates extremely flammable gases.
Oxidizing properties:	Not applicable
Ignition temperature:	Not determined
Decomposition temperature:	Not determined
Auto igniting:	Spontaneously flammable in air.
Viscosity:	Not applicable
Other information:	No further relevant information available

## **SECTION 10: STABILITY AND REACTIVITY**

- 10.1 **Reactivity**  
Not applicable.
- 10.2 **Stability**  
Stable under normal storage conditions.
- 10.3 **Possibility of hazardous reactions**  
Reacts with oxygen.  
Powder may cause fire.  
Contact with water releases flammable gases.  
Spontaneously flammable in air.
- 10.4 **Conditions to avoid**  
Heat, flame, sparks, static electricity, other ignition sources.
- 10.5 **Incompatible materials**  
Water/moisture, acids, oxidizing agents, air.

## **SECTION 11: TOXICOLOGICAL INFORMATION**

- 11.1 **Target Organs**  
Not available
- 11.2 **Toxicity**  
Not available
- 11.3 **Skin corrosion/irritation**  
Not available
- 11.4 **Serious eye damage/irritation**  
Not available
- 11.5 **Carcinogenicity**  
Not available

## **SECTION 12: ECOLOGICAL INFORMATION**

- 12.1 **Toxicity**  
Not available
- 12.2 **Persistence and degradability**  
Not available
- 12.3 **Bio-accumulative potential**  
Not available
- 12.4 **Mobility in soil**  
Not available

- 12.5 **Results of PBT and vPvB assessment**  
Not applicable
- 12.6 **Other adverse effects**  
No known significant effects or critical hazards.

## **SECTION 13: DISPOSAL CONSIDERATIONS**

Contact a licensed professional waste disposal service. Dispose in a manner consistent with federal, state and local environmental regulations.

## **SECTION 14: TRANSPORT INFORMATION**

Land transport (ADR/RID) (cross-border),  
Maritime transport (IMDG),  
Air transport (ICAO-TI and IATA-DGR).

- 14.1 **UN number**  
UN 3178
- 14.2 **UN proper shipping name**  
Flammable Solids, Inorganic
- 14.3 **Transport hazard class**  
Class 4.1
- 14.4 **Packing group**  
Packing group III
- 14.5 **Environmental hazards**  
No
- 14.6 **Special precautions for user**  
Not available
- 14.7 **Transport in bulk according to Annex II of MARPOL 73/78 and IBS Code**  
Not available

## SECTION 15: REGULATORY INFORMATION

### United States:

Toxic Substance Control Act (TSCA):	Listed
Superfund Amendments and Reauthorization Act (SARA 302):	Not Listed
Superfund Amendments and Reauthorization Act (SARA 311/312):	Listed
Superfund Amendments and Reauthorization Act (SARA 313):	Listed

### European Union:

European Inventory of Existing Chemical Substances (EINECS):	No. 231-176-9
Hazard Codes:	F, Xi
Risk Statements:	15-17-36/37/38
Safety Statements:	16-26-27-35-36/37/39-43

### Canada:

Canadian Domestic Substances List (DSL):	Listed
Canadian Domestic Substances List (NDSL):	Not Listed

## SECTION 16: OTHER INFORMATION

This product is manufactured for the purpose of being heated and ejected by equipment specifically designed for that use. The powder is typically used as a visual special effect, to simulate sparks or pyro technique.

### Note:

The information provided in this safety data sheet is correct to the best of our knowledge, information, and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such materials used in combination with any other materials or in any process, unless specified in the text.

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