

# Material Safety Data Sheet

## According to 91/155 EEC

Printing date 28.09.2004

Reviewed on 28.09.2004

### 1 Identification of substance:

· **Product details:**

· **Trade name:** ST101/AM/DF/; ST101/AM/O/; ST101/AM/OD/; ST101/DF/; ST101/O/;  
ST101/OD/; ST101/PIECES/; ST101/PILL/;  
ST121/; ST122/; ST123/; ST170/; ST171/; ST172; ST173/; ST175/;  
ST182HP/; ST185/; ST186/; ST198 GRANULES; ST198/;  
ST301/; ST707; ST707TG1/; ST717/; ST736/; ST737/;  
ST801

· **Document number** BSDSE991221 Rev. 1

· **Application of the substance / the preparation** Absorbent

· **Manufacturer/Supplier:**

SAES Getters S.p.A.

Viale Italia 77

20020 Lainate (MI)

Italy

SAES Advanced Technologies S.p.A.

Nucleo Industriale

67021 Avezano (AQ)

Italy

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· **Informing department:** Product safety department.

### 2 Composition/Data on components:

· **Chemical characterization**

· **Description:** Metal compound

· **Dangerous components:**

CAS: 207740-67-7

EC Number: 040-002-00-9

zirconium powder (non pyrophoric)

R 15

25-90%

· **Additional information**

Metals possibly present:

Zirkonium

Titanium

Vanadium

Aluminium

Niobium

Palladium

Iron

Molybdenum

Rare Earth metals

### 3 Hazards identification

· **Hazard designation:**



F Highly flammable

· **Information pertaining to particular dangers for man and environment**

R 11 Highly flammable.

### 4 First aid measures

· **General information** No special measures required.

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- **After skin contact** The product is not skin irritating.
- **After eye contact** Rinse opened eye for several minutes under running water.
- **After swallowing** In case of persistent symptoms consult doctor.

### 5 Fire fighting measures

- **Suitable extinguishing agents** Special powder for metal fires. Do not use water.
- **For safety reasons unsuitable extinguishing agents** Water
- **Special hazards caused by the material, its products of combustion or flue gases:** Metal oxides
- **Protective equipment:** Put on breathing apparatus.
- **Additional information** Collect contaminated fire fighting water separately. It must not enter drains.

### 6 Accidental release measures

- **Person-related safety precautions:**  
 Ensure adequate ventilation.  
 Avoid causing dust.  
 Remove all ignition sources.
- **Measures for environmental protection:** Do not allow to enter drainage system, surface or ground water.
- **Measures for cleaning/collecting:**  
 Ensure adequate ventilation.  
 Do not flush with water or aqueous cleansing agents.

### 7 Handling and storage

- **Handling**
- **Information for safe handling:** Prevent formation of dust.
- **Information about protection against explosions and fires:** Keep ignition sources away - Do not smoke.
- **Storage**
- **Requirements to be met by storerooms and containers:** No special requirements.
- **Information about storage in one common storage facility:** Not required
- **Further information about storage conditions:**  
 Keep container tightly sealed.  
 Store in cool, dry conditions in well sealed containers.

### 8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with critical values that require monitoring at the workplace:**  
 The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the compilation were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures** Wash hands during breaks and at the end of the work.
- **Breathing equipment:** Not required.
- **Protection of hands:**  
 Protective gloves  
 The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

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Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:** Safety glasses

### 9 Physical and chemical properties:

· **General Information**

<b>Form:</b>	Solid
<b>Colour:</b>	According to product specification
<b>Smell:</b>	Characteristic

· **Change in condition**

**Melting point/Melting range:** Not determined  
**Boiling point/Boiling range:** Not determined

· **Flash point:** Not applicable

· **Inflammability (solid, gaseous)** Highly flammable.

· **Self-inflammability:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive.

· **Density** Not determined

· **Solubility in / Miscibility with**

**Water:** Insoluble

### 10 Stability and reactivity

· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

· **Materials to be avoided:** Water

· **Dangerous reactions** Contact with water releases flammable gases

· **Dangerous products of decomposition:** Flammable gases/vapours

### 11 Toxicological information

· **Acute toxicity:**

· **Primary irritant effect:**

· **on the skin:** No irritant effect

· **on the eye:** No irritant effect.

· **Sensitization:** No sensitizing effect known.

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### 12 Ecological information:

- **General notes:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

### 13 Disposal considerations

- **Product:**
- **Recommendation**  
 Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

- **Land transport ADR/RID (cross-border)**



- **ADR/RID Class:** 4.1 (F3) Flammable solids.
- **Kemler Number:** 40
- **UN-Number:** 3089
- **Packaging group:** II
- **Label:** 4.1
- **Designation of goods:** UN 3089 METAL POWDER, FLAMMABLE, N.O.S. (zirconium, titane)

- **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 4.1
- **UN/ID Number:** 3089
- **Label:** 4.1
- **Packaging group:** II
- **Correct technical name:** METAL POWDER, FLAMMABLE, N.O.S.

### 15 Regulatory information

- **Designation according to EC guidelines:**  
 The product has been classified/labelled in accordance with EC Directives / relevant national laws.
- **Code letter and hazard designation of product:**



F Highly flammable

- **Risk phrases:**  
 11 Highly flammable.

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- **Safety phrases:**

- 24 Avoid contact with skin.
- 33 Take precautionary measures against static discharges.
- 43 In case of fire, use metallic extinguishing powder. Never use water.

- **National regulations**

- **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

### 16 Other information:

*These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

- **Relevant R-phrases**

*The(se) R-phrases are those of the ingredient(s) and do(es) NOT represent the classification of the preparation.*

- 15 Contact with water liberates extremely flammable gases.

- **Department issuing data specification sheet:**

C.S.B. GmbH                      Phone: ++49-2151 - 652086-0  
 Oberstraße 10                    Fax: ++49-2151 - 652086-9  
 D-47829 Krefeld

- **Contact:**

- \* **Data compared to the previous version altered.**

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