

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name:** Rhenium pellets
- **Article number:** 89740508
- **CAS Number:**
7440-15-5
- **EC number:**
231-124-5
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Intermediate
- **Manufacturer/Supplier:**
Heraeus Deutschland GmbH & Co. KG
Heraeusstr. 12-14
D-63450 Hanau
Germany
Tel: +49-(0)6181-355707
- **Further information obtainable from:** sds@heraeus.com

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
The substance is not classified according to the CLP regulation.
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** Not applicable.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.1 Chemical characterisation: Substances**
- **CAS No. Description**
7440-15-5 rhenium
- **Identification number(s)**
- **EC number:** 231-124-5

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** In case of accident or if you feel unwell, seek medical advice immediately.
- **After inhalation:**
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
- **After skin contact:** Immediately rinse with water.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**
Rinse out mouth and then drink plenty of water.
Seek immediate medical advice.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

(Contd. on page 2)

Trade name: Rhenium pellets

(Contd. of page 1)

- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
The usual precautionary measures are to be adhered to when handling chemicals.
- **6.2 Environmental precautions:** No special measures required.
- **6.3 Methods and material for containment and cleaning up:**
Pick up mechanically.
Prevent formation of dust.
- **6.4 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.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Use personal protection equipment.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep container tightly sealed.
Store in dry conditions.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals.
Wash hands before breaks and at the end of work.
- **Respiratory protection:** If dust or spray is present use respiratory protection filter P3.
- **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
- **Material of gloves**
Leather gloves
Rubber gloves

(Contd. on page 3)

Trade name: Rhenium pellets

(Contd. of page 2)

- Plastic gloves
- **Eye protection:** Not required.

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

- **Form:** Pellets
- **Colour:** Grey
- **Odour:** Odourless

· **Change in condition**

- **Melting point/Melting range:** 3180 °C
- **Boiling point/Boiling range:** 5900 °C

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Product is not flammable.

· **Self-igniting:** Product is not self igniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Density at 20 °C:** 21,02 g/cm³

· **Solubility in / Miscibility with water:** Insoluble.

· **Solvent content:**

· **VOC (EC)** 0,00 %

· **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

· **10.1 Reactivity**

· **10.2 Chemical stability**

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

· **10.3 Possibility of hazardous reactions** No dangerous reactions known.

· **10.4 Conditions to avoid** No further relevant information available.

· **10.5 Incompatible materials:** No further relevant information available.

· **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

· **Additional information:** -

SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**

· **Acute toxicity:**

· **LD/LC50 values relevant for classification:**

7440-15-5 rhenium

LD50 intraperitoneal	> 10000 mg/kg (mouse)
	RTECS

· **Primary irritant effect:**

· **on the skin:** No irritant effect.

· **on the eye:** No data available.

· **Sensitisation:** No sensitising effects known.

(Contd. on page 4)

Trade name: Rhenium pellets

(Contd. of page 3)

· Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

The substance is not subject to classification according to the latest version of the EU lists.

SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity: *No further relevant information available.*

· 12.2 Persistence and degradability *No further relevant information available.*

· 12.3 Bioaccumulative potential *No further relevant information available.*

· 12.4 Mobility in soil *No further relevant information available.*

· 12.5 Results of PBT and vPvB assessment

· PBT: *Not applicable.*

· vPvB: *Not applicable.*

· 12.6 Other adverse effects *No further relevant information available.*

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

· Recommendation

Contact manufacturer for recycling information.

Disposal must be made according to official regulations.

· Uncleaned packaging:

· Recommendation: *Disposal must be made according to official regulations.*

SECTION 14: Transport information

· 14.1 UN-Number

· ADR, IMDG, IATA *Void*

· 14.2 UN proper shipping name

· ADR *Void*

· IMDG, IATA *Void*

· 14.3 Transport hazard class(es)

· ADR, IMDG, IATA

· Class *Void*

· 14.4 Packing group

· ADR, IMDG, IATA *Void*

· 14.5 Environmental hazards:

· Marine pollutant: *No*

· 14.6 Special precautions for user *Not applicable.*

· 14.7 Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code *Not applicable.*

· UN "Model Regulation": *-*

SECTION 15: Regulatory information

· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

No further relevant information available.

(Contd. on page 5)

Trade name: Rhenium pellets

(Contd. of page 4)

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

· *** Data compared to the previous version altered.**