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

· **1.1 Product identifier**
  - **Trade name:** Platinum, Platinum powder, Platinum sponge, Platinum black
  - **CAS Number:** 7440-06-4
  - **EC number:** 231-116-1

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
  - **Application of the substance / the mixture**
    - Catalyst
    - Intermediate
    - Precious metal alloy for technical purposes

· **Manufacturer/Supplier:**
  - Heraeus Deutschland GmbH & Co. KG
  - Heraeustr. 12-14
  - D-63450 Hanau
  - Germany
  - Tel: +49-(0)6181-355707

· **Further information obtainable from:** sds@heraeus.com

· **1.4 Emergency telephone number:**
  - Emergency Contact (24-Hour-Phone Number)
    - GBK-GmbH, Ingelheim: (international) +49 6132-84463
    - GBK/ Infotrac ID 105241: (China domestic) 4001 200 761

**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.

· **2.2 Label elements**
  - **Labelling according to Regulation (EC) No 1272/2008** Void
  - **Hazard pictograms** Void
  - **Signal word** Void
  - **Hazard statements** Void

· **2.3 Other hazards**
  - **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**
    - 7440-06-4 Platinum

· **Identification number(s)**
  - **EC number:** 231-116-1

**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 and to be sure call for a doctor.

(Contd. on page 2)
· **After skin contact:**
  Immediately wash with water and soap and rinse thoroughly.
  If skin irritation continues, consult a doctor.
· **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.
  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.

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**SECTION 5: Firefighting measures**

· **5.1 Extinguishing media**
  Suitable extinguishing agents:
  Use fire extinguishing methods suitable to surrounding conditions.
  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**
  The product is not combustible.
  Fine sized metal shows catalytic effects and can accelerate combustion processes. Keep away from combustible material.
· **5.3 Advice for firefighters**
  Protective equipment: No special measures required.

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**SECTION 6: Accidental release measures**

· **6.1 Personal precautions, protective equipment and emergency procedures**
  Avoid formation of dust.
· **6.2 Environmental precautions:**
  No special measures required.
· **6.3 Methods and material for containment and cleaning up:**
  Send for recovery or disposal in suitable receptacles.
· **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.

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**SECTION 7: Handling and storage**

· **7.1 Precautions for safe handling**
  Wear protective equipment. Keep unprotected persons away.
  Prevent formation of dust.
  Information about fire - and explosion protection:
  The product is not combustible.
  see chapter 5
· **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: None.
· **7.3 Specific end use(s)**
  No further relevant information available.

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**SECTION 8: Exposure controls/personal protection**

· **Additional information about design of technical facilities:**
  No further data; see item 7.
Trade name: Platinum, Platinum powder, Platinum sponge, Platinum black

- **8.1 Control parameters**
  - Ingredients with limit values that require monitoring at the workplace:
    - 7440-06-4 Platinum - Catalytic grade (50-100%)
      - WEL: Long-term value: 5 mg/m³
  - Additional information: The lists valid during the making were used as basis.

- **8.2 Exposure controls**
  - Personal protective equipment:
    - General protective and hygienic measures: 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: No chemical-protective gloves required.
    - Eye protection: Safety glasses
    - Body protection: Light weight protective clothing

- **SECTION 9: Physical and chemical properties**
  - **9.1 Information on basic physical and chemical properties**
    - General Information
      - Appearance:
        - Form: Solid in various forms
        - Colour: Grey
        - Odour: Odourless
      - Change in condition
        - Melting point/Melting range: 1772 °C
        - Boiling point/Boiling range: 3827 °C
    - Flash point: Not applicable.
    - Danger of explosion: Product does not present an explosion hazard.
    - Density at 20 °C: 21.45 g/cm³
    - Solubility in / Miscibility with water: Insoluble.
  - **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:**
      - 7440-06-4 Platinum
        - Oral LD50 >9100 mg/kg (rat)
Trade name: Platinum, Platinum powder, Platinum sponge, Platinum black

§ Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: No irritating effect.

§ Sensitisation: No sensitising effects known.

§ 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.

§ 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.

§ Additional ecological information:

§ General notes: Generally not hazardous for water

§ 12.5 Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.
- 12.6 Other adverse effects: No further relevant information available.

§ 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.

§ 14.1 UN-Number
- ADR, IMDG, IATA Void

§ 14.2 UN proper shipping name
- ADR, 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:
- Not applicable.

§ 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.
- 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.

- Department issuing MSDS: HH-EHS- Chemical Safety
- 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)
  ICAO: International Civil Aviation Organisation
  ADR: Accord européen sur le transport des marchandises dangereuses par Roote (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)
  LC50: Lethal concentration, 50 percent
  LD50: Lethal dose, 50 percent
- * Data compared to the previous version altered.