Heegermaterials

SAFETY DATA SHEET

Revision Number 2

Revision Date 18-Feb-2024

| | 1. Identification |
|---|--|
| Product Name | Rhenium powder |
| CAS-No | 7440-15-5 |
| Synonyms | No information available |
| Recommended Use Uses advised against | Laboratory chemicals. Food, drug, pesticide or biocidal product use. |
| Details of the supplier of the safety | data sheet |
| | y-Friday, 8am-7pm EST), call (800) 343-0660. chem 24 at (866) 928-0789. |
| | 2. Hazard(s) identification |
| Classification Classification under 2012 OSHA Haza | rd Communication Standard (29 CFR 1910.1200) |

Based on available data, the classification criteria are not met

Label Elements None required

Hazards not otherwise classified (HNOC)

None identified

3. Composition/Information on Ingredients

| Component | CAS-No | Weight % |
|-----------|-----------|----------|
| Rhenium | 7440-15-5 | 99.9 |

| 4. First-aid measures | | | | | |
|---|---|--|--|--|--|
| Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. medical attention. | | | | | |
| Skin Contact | Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur. | | | | |
| Inhalation | Remove to fresh air. Get medical attention immediately if symptoms occur. | | | | |
| Ingestion | Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur. | | | | |
| Most important symptoms and | None reasonably foreseeable. | | | | |
| effects Notes to Physician | Treat symptomatically | | | | |
| 5. Fire-fighting measures | | | | | |

| Unsuitable Extinguishing Media | No information available | | |
|--|--|--------------------------------|-------------------------------|
| Flash Point Method - | No information available No information available | | |
| Autoignition Temperature Explosion Limits Upper Lower Sensitivity to Mechanical Impac Sensitivity to Static Discharge Specific Hazards Arising from the Keep product and empty container av Hazardous Combustion Products None known. Protective Equipment and Precauti As in any fire, wear self-contained bre protective gear. | ed or equivalent) and full | | |
| NFPA Health | Flammability 0 | Instability 0 | Physical hazards N/A |
| V | 0 | 0 | IN/A |
| | 6. Accidental rele | ease measures | |
| Personal Precautions | Ensure adequate ventilation formation. | . Use personal protective equi | pment as required. Avoid dust |
| Environmental Precautions | Should not be released into Information. | the environment. See Section | 12 for additional Ecological |

Methods for Containment and Clean Sweep up and shovel into suitable containers for disposal. Avoid dust formation. Up

7. Handling and storage

Handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation. Avoid dust formation.

| Storage Keep containers tightly closed in a dry, cool and well-ventilated place. | | | | | | |
|--|---|--|--|--|--|--|
| 8. E | xposure controls / personal protection | | | | | |
| Exposure Guidelines | This product does not contain any hazardous materials with occupational exposure limitsestablished by the region specific regulatory bodies. | | | | | |
| Engineering Measures | None under normal use conditions. | | | | | |
| Personal Protective Equipment | | | | | | |
| Eye/face Protection | Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. | | | | | |
| Skin and body protection | Wear appropriate protective gloves and clothing to prevent skin exposure. | | | | | |
| Respiratory Protection | No protective equipment is needed under normal use conditions. | | | | | |
| Hygiene Measures | Handle in accordance with good industrial hygiene and safety practice. | | | | | |
| | D. Dhusia al and a hamia al proportion | | | | | |

9. Physical and chemical properties

| | I I |
|--|--------------------------------|
| Physical State | Powder Solid |
| Appearance | Grey |
| Odor Odor | Odorless |
| Odor Threshold | No information available |
| pH | |
| Melting Point/Range | - 31 80.00 °C / 5756 °F |
| Boiling Point/Range | 5630 °C / 10166 °F @ 760 mmHg |
| Flash Point | No information available |
| Evaporation Rate | Not applicable |
| Flammability (solid,gas) | No information available |
| Flammability or explosive limits | |
| Upper | No data available |
| Lower | No data available |
| Vapor Pressure | No information available |
| Vapor Density | Not applicable |
| Specific Gravity | No information available |
| Solubility | Insoluble in water |
| Partition coefficient; n-octanol/water | No data available |
| Autoignition Temperature | Not applicable |
| Decomposition Temperature | No information available |
| Viscosity | Not applicable |
| Molecular Formula | Re |
| Molecular Weight | 186.20 |
| | |

10. Stability and reactivity

| Reactive Hazard | None known, based on information available |
|------------------------|--|
| Stability | Stable under normal conditions. |
| Conditions to Avoid | Incompatible products. |
| Incompatible Materials | Strong oxidizing agents |

Hazardous Decomposition Products None under normal use conditions

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions

None under normal processing.

11. Toxicological information

Acute Toxicity

| Product Information Component Information Toxicologically Synergistic Products | No information available |
|---|---|
| Delayed and immediate effects as | well as chronic effects from short and long-term exposure |
| Irritation | No information available |
| Sensitization | No information available |
| Carcinogenicity | The table below indicates whether each agency has listed any ingred |

The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component | CAS-No | IARC | NTP | ACGIH | OSHA | Mexico | | |
|--|----------------|---------------------------|--|------------|--|------------|--|--|
| Rhenium | 7440-15-5 | Not listed | Not listed | Not listed | Not listed | Not listed | | |
| Mutagenic Effects | | No information ava | ailable | | | | | |
| Reproductive Effects | CGO | No information ava | ailable. | | | | | |
| Developmental Effect | ts | No information ava | ailable. | | | | | |
| Teratogenicity | | No information ava | ailable. | | | | | |
| STOT - single exposu STOT - repeated expo | | None known | dier | ials. | | | | |
| Aspiration hazard | | No information ava | ailable | 121 | | | | |
| Symptoms / effects, delayed | both acute and | No information ava | ailable | -12 | In | | | |
| Endocrine Disruptor | Information | No information ava | ailable | | A.C. | | | |
| Other Adverse Effect | S | The toxicological p | The toxicological properties have not been fully investigated. | | | | | |
| 12. Ecological information | | | | | | | | |
| Ecotoxicity | | | | | | | | |
| Persistence and Deg | radability | No information ava | ailable | | | | | |
| Bioaccumulation/ Ac | cumulation | No information ava | ailable. | | | | | |
| Mobility | | No information available. | | | | | | |
| | | 13. Dispo | 13. Disposal considerations | | | | | |
| Waste Disposal Meth | ods | | | | discarded chemical | | | |
| | | | | | so consult local, reg te and accurate cla | | | |

| 14. Transport information | | | | |
|----------------------------|---------------|--|--|--|
| DOT TDG IATA | Not regulated | | | |
| TDG | Not regulated | | | |
| ΙΑΤΑ | Not regulated | | | |
| IMDG/IMO | Not regulated | | | |
| 15. Regulatory information | | | | |

United States of America Inventory

| Component | CAS-No | TSCA | TSCA Inventory notification - Active/Inactive | TSCA - EPA Regulatory Flags |
|-----------|-----------|------|--|--------------------------------|
| Rhenium | 7440-15-5 | Х | ACTIVE | - |

Legend:

TSCA - Toxic Substances Control Act, (40 CFR Part 710) X - Listed '-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

International Inventories Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSC), Korea (ECL).

| Component Component | CAS-No | DSL | NDSL | EINECS | PICCS | ENCS | AICS | IECSC | KECL |
|--|---------------------|--------------|-------------|------------|--------------|------------|------|-------|----------|
| Rhenium | 7440-15-5 | Х | - | 231-124-5 | Х | Х | Х | Х | KE-30290 |
| U.S. Federal Regulations | SCI | `/ | 1 | | | | | | |
| SARA 313 | Not app | licable | A1 | | | | | | |
| SARA 311/312 Hazard Categor | ies See sec | tion 2 for r | more inform | nation | • | | | | |
| CWA (Clean Water Act) | Not app | licable | | ~1 | ∂I | | | | |
| Clean Air Act | Not app | licable | | | | | 6 | | |
| OSHA - Occupational Safety and Health Administration | I Not app | licable | | | | S II | 1C | | |
| CERCLA | Not app | licable | | | | | | | |
| California Proposition 65 | This pro | duct does | not contai | n any Prop | osition 65 | chemicals. | | | |
| U.S. State Right-to-Know Regulations | Not app | licable | | | | | | | |
| U.S. Department of Transporta Reportable Quantity (RQ): DOT Marine Pollutant DOT Severe Marine Pollutant | tion N N N | | | | | | | | |
| U.S. Department of Homeland Security | This pro | duct does | not contai | n any DHS | chemicals | S. | | | |
| Other International Regulation | <u>s</u> | | | | | | | | |
| Mexico - Grade | No infor | mation ava | ailable | | | | | | |

16. Other information

Revision Date

18-Feb-2024

Revision Summary

SDS authoring systems update, replaces ChemGes SDS No. 7440-15-5/1.

Disclaimer

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 material used in combination with any other materials or in any process, unless specified in the text

End of SDS

Heeser Materials Inc.