



SAFETY DATA SHEET

MATERION

1. Product and company identification

Product name Germanium Product
Manufacturer/Supplier Materion Advanced Materials Group
Address 42 Mt. Ebo Road South
Brewster, NY 10509
United States
Telephone Supplier Phone 1+845.279.0900
e-mail Not available.
Contact person
Emergency telephone number Chemtrec 1+703.527.3887
Recommended use and Limitations on use
Recommended use Not available.
SDS number 73

2. Hazards identification

GHS classification
Physical hazards Not classified.
Health hazards Not classified.
Environmental hazards Not classified.

Label elements

Symbols None.
Signal word None.
Hazard statement None.

3. Composition/information on ingredients

Substance or mixture Substance

| Chemical property | CAS Number | Concentration (%) |
|--------------------------|-------------------|--------------------------|
| Germanium | 7440-56-4 | 99 - 100 |

4. First aid measures

Inhalation Not available.
Skin contact Not available.
Eye contact Not available.
Ingestion Not available.
Potential delayed effects Not available.
Personal protection for first-aid responders Not available.
Notes to physician Not available.

5. Fire-fighting measures

Extinguishing media Not available.
Extinguishing media to avoid None.
HAZCHEM Code Number None.
Specific hazards during fire fighting None.
Special fire fighting procedures Not available.
Protection of fire-fighters Not available.
Hazards from combustion products None.

6. Accidental release measures

| | |
|--|----------------|
| Personal precautions, protective equipment and emergency procedures | Not available. |
| Environmental precautions | Not available. |
| Spill cleanup methods | Not available. |

7. Handling and storage

Handling

| | |
|---|----------------|
| Precautions | Not available. |
| Safe handling advice | Not available. |
| Prevention of fire and explosion | Not available. |

Storage

| | |
|------------------------------------|----------------|
| Suitable storage conditions | Not available. |
| Incompatible materials | Not available. |

8. Exposure controls/personal protection

Exposure limits

No exposure limits noted for ingredient(s).

| | |
|--------------------------------|--|
| Biological limit values | No biological exposure limits noted for the ingredient(s). |
|--------------------------------|--|

Engineering controls

Personal protective equipment

| | |
|---------------------------------------|----------------|
| Respiratory protection | Not available. |
| Skin protection | Not available. |
| Eye/face protection | Not available. |
| Radioactive or thermal hazards | Not available. |
| Hygiene measures | Not available. |

9. Physical and chemical properties

Appearance

| | |
|-----------------------|----------------|
| Physical state | Solid. |
| Form | Not available. |
| Colour | Not available. |

Odour Not applicable.

Odour threshold Not available.

pH Not available.

Melting point/freezing point 937.2 °C (1718.96 °F)

Boiling point, initial boiling point, and boiling range 2700 °C (4892 °F)

Flash point Not available.

Auto-ignition temperature Not applicable.

Flammability (solid, gas) Not applicable.

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit – upper (%) Not available.

Vapour pressure < 0.0000001 kPa at 25 °C

Vapour density Not available.

Evaporation rate Not available.

Relative density Not available.

Density 5.32 g/cm³ estimated at 25 °C

| | |
|--|----------------|
| Solubility(ies) | |
| Solubility (water) | Not available. |
| Partition coefficient (n-octanol/water) | Not available. |
| Decomposition temperature | Not available. |
| Molecular weight | 72.59 g/mol |
| Other data | |
| Molecular formula | Ge |
| Specific gravity | 5.32 at 25 °C |

10. Stability and reactivity

| | |
|---|-------|
| Stability | None. |
| Conditions to avoid | None. |
| Incompatible materials | None. |
| Hazardous decomposition products | None. |
| Possibility of hazardous reactions | None. |

11. Toxicological information

| | |
|---|----------------|
| Acute toxicity | Not available. |
| Information on likely routes of exposure | |
| Ingestion | Not available. |
| Inhalation | Not available. |
| Skin contact | Not available. |
| Eye contact | Not available. |
| Routes of exposure | Not available. |
| Symptoms | Not available. |
| Skin corrosion/irritation | Not available. |
| Serious eye damage/eye irritation | Not available. |
| Skin sensitiser | Not available. |
| Chronic effects | Not available. |
| Relevant negative data | Not available. |

12. Ecological information

| | |
|--|----------------|
| Ecotoxicity | Not available. |
| Persistence and degradability | Not available. |
| Bioaccumulation | Not available. |
| Partition coefficient n-octanol/water (log Kow) | Not available. |
| Bioconcentration factor (BCF) | Not available. |
| Mobility | Not available. |
| Other hazardous effects | Not available. |

13. Disposal considerations

| | |
|-------------------------------------|----------------|
| Disposal methods/information | Not available. |
| Special precautions | Not available. |

14. Transport information

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not available.

15. Regulatory information

Applicable regulations

New Zealand Inventory of Chemicals (NZIoC): Registration status

Germanium (CAS 7440-56-4)

HSNO Approved

16. Other information

References Not available.

Issued by
Not available.

Prepared by
Not available.

Issue date 01-June-2015