

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

Catalogue Number	CS-CE-00988
Product Name	Germanium
CAS No.	7440-56-4
Category	Inorganics
Synonyms	Germanium
Brand	Clearsynth Labs Ltd.
Identified uses	Laboratory Chemicals
Uses advised against	Not available
Company	Clearsynth Labs Ltd. Mumbai, India
Emergency Phone #	+91-22-245045900
REACH No.	Not available

SECTION 2: Hazards identification

Disclaimer: This is sample MSDS. Please email sales@clearsynth.com for more details.

2.1 Classification of the substance or mixture-Regulation (EC) No 1272/2008:

Not available

2.2 Label Elements

Signal Word: Warning

Not available

Hazard Statement(s)

Code	Statement
H228	Not available
H361	Not available
H373	Not available
H412	Not available

Precautionary Statement(s)

Code	Statement
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P203	Not available
P210	Not available
P240	Not available
P241	Not available
P260	Not available
P273	Not available
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P318	Not available
P319	Get medical help if you feel unwell.
P370+P378	Not available
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulation

SECTION 3: Composition / information on ingredients

3.1 Substance

Component : Germanium

CAS Number : 7440-56-4

Molecular Formula : Ge

Molecular Weight : 72.64

Parent Chemical : Germanium

Synonyms : Germanium

Concentration : Not available

SECTION 4: First aid measures

SECTION 4: First-aid measures

4.1 Description of first aid measures

- General advice: Seek medical attention if symptoms persist or if exposure is significant. Show this SDS to medical personnel.
- Inhalation: Move person to fresh air. If breathing is difficult, seek medical attention.
- Skin contact: Wash with soap and water. Remove contaminated clothing and wash before reuse.
- Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention if irritation persists.
- Ingestion: Rinse mouth. Do not induce vomiting. Seek medical attention if feeling unwell.

4.2 Most important symptoms and effects, both acute and delayed

- Not available.

4.3 Indication of any immediate medical attention and special treatment needed

- Treat symptomatically. No data available.

SECTION 5: Firefighting measures

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

- Suitable extinguishing media: Use extinguishing media appropriate for surrounding fire.
- Unsuitable extinguishing media: Not available.

5.2 Special hazards arising from the substance or mixture

- Specific hazards: Not available.
- Hazardous combustion products: Not available.

5.3 Advice for firefighters

- Protective equipment: Wear self-contained breathing apparatus (SCBA) and full protective gear.
- Additional information: Cool containers with water spray if exposed to fire. Avoid inhalation of fumes/dust.

SECTION 6: Accidental release measures

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Avoid dust formation and inhalation of dust.
- Use appropriate personal protective equipment (see Section 8).
- Ensure adequate ventilation.

6.2 Environmental precautions

- Avoid release to the environment. Prevent entry into drains, surface water, or soil.

6.3 Methods and material for containment and cleaning up

- Collect spillage mechanically (e.g., sweep carefully) avoiding dust generation.
- Place in a suitable, closed container for disposal.
- Clean contaminated area after material pickup.

6.4 Reference to other sections

- See Section 8 for exposure controls/personal protection and Section 13 for disposal considerations.

SECTION-7: Handling and storage

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Avoid breathing dust.
- Avoid contact with eyes and skin.
- Use with adequate ventilation.
- Keep container tightly closed when not in use.
- Practice good industrial hygiene.

7.2 Conditions for safe storage, including any incompatibilities

- Store in a cool, dry, well-ventilated place.
- Keep in original container, tightly closed.

- Incompatible materials: Not available.

7.3 Specific end use(s)

- Not available.

SECTION 8: Exposure controls / personal protection

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

- Occupational exposure limits: Not available.
- Biological limit values: Not available.

8.2 Exposure controls

- Engineering controls: Provide appropriate local exhaust ventilation to minimize dust.
- Personal protective equipment (PPE):
- Eye/face protection: Safety glasses with side shields or chemical goggles.
- Skin protection: Protective gloves. Wear protective clothing as appropriate.
- Respiratory protection: If dust is generated and ventilation is inadequate, use a suitable particulate respirator.
- Hygiene measures: Wash hands after handling. Do not eat, drink, or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Test	Result
Appearance	No data available
IR spectrum	No data available
pH	No data available
Solubility	No data available

Property	Value
a) Physical State	No data available
b) Color	No data available
c) Odor	No data available
d) pH	No data available
e) Vapour Pressure	No data available
f) Viscosity	No data available
g) Initial Boiling Point and boiling range	No data available

Property	Value
h) Melting Point / Freezing Point	No data available
i) Auto Ignition Temperature	No data available
j) Flash Point	No data available
k) Explosion Limit, Lower	No data available
l) Explosion Limit, Upper	No data available
m) Decomposition Temperature	No data available
n) Loss on Drying	No data available
o) Relative Density	No data available
p) Solubility (in DMSO)	No data available
q) Oxidizing Properties	No data available

SECTION 10: Stability and reactivity

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10.1 Reactivity

- No data available.

10.2 Chemical stability

- Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

- No data available.

10.4 Conditions to avoid

- Avoid dust generation and dispersion.

- Avoid incompatible conditions: Not available.

10.5 Incompatible materials

- Not available.

10.6 Hazardous decomposition products

- Not available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

- Acute toxicity: AMONG SUBGROUP IVA METALS, GERMANIUM IS CONSIDERED LEAST TOXIC...

PHARMACOLOGICAL INERTNESS, DIFFUSIBILITY, & RAPID EXCRETION ARE RESPONSIBLE FOR LOW GERMANIUM TOXICITY. For more Human Toxicity Excerpts (Complete) data for GERMANIUM (11 total), please visit the HSDB record page.

- Skin corrosion/irritation: ...GERMANIUM OXIDE HAS NO CORROSIVE ACTION ON SKIN...

- Serious eye damage/eye irritation: No data available.

- Respiratory or skin sensitization: No data available.
- Germ cell mutagenicity: No data available.
- Carcinogenicity: No data available.
- Reproductive toxicity: No data available.
- STOT-single exposure: No data available.
- STOT-repeated exposure: CHRONIC ADMIN TO RATS IN FOOD @ 1000 PPM OR IN WATER @ 100 PPM OF GERMANIUM OXIDE CAUSED GROWTH INHIBITION & MORTALITY. SURVIVORS APPEARED TO DEVELOP A TOLERANCE.
- Aspiration hazard: No data available.

Likely routes of exposure

- No data available.

Symptoms related to the physical, chemical and toxicological characteristics

- Symptoms: Low temperature, languor, diarrhea, cyanosis, extreme depression of heart and breath, edema, lung hemorrhage, spot hemorrhage from the small intestine wall, peritoneal extravasation.

SECTION 12: Ecological information

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12.1 Toxicity

- No data available.

12.2 Persistence and degradability

- No data available.

12.3 Bioaccumulative potential

- No data available.

12.4 Mobility in soil

- No data available.

12.5 Results of PBT and vPvB assessment

- Not available.

12.6 Endocrine disrupting properties

- Not available.

12.7 Other adverse effects

- No data available.

SECTION 13: Disposal considerations

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13.1 Waste treatment methods

- Dispose of contents/container in accordance with local/regional/national/international regulations.
- Do not discharge to drains or the environment.
- Contaminated packaging: Dispose of as unused product or according to local requirements.
- Waste code: Not available.

SECTION 14: Transport information

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- UN number: Not available.
- UN proper shipping name: Not available.
- Transport hazard class(es): Not available.
- Packing group: Not available.
- Environmental hazards: Not available.
- Special precautions for user: Not available.
- Transport in bulk according to IMO instruments: Not available.

SECTION 15: Regulatory information

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

- Not available.

15.2 Chemical safety assessment

- Not available.

SECTION 16: Other information

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- Product name: Germanium
- CAS No.: 7440-56-4
- Catalog No.: CS-CE-00988
- Supplier: Clearsynth Labs Ltd., Mumbai, India
- Emergency phone: +91-22-245045900

Disclaimer

- The information provided is believed to be accurate based on available data, but no warranty is expressed or implied. Users are responsible for determining suitability for their particular application and for compliance with applicable regulations.

Revision information

- Revision date: Not available.
- Version: Not available.

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