

Material Safety Data Sheet

1. Product and company identification

Product name : Germanium(IV) oxide
Name of manufacturer : KANTO CHEMICAL CO., INC.
Address : 2-1, Nihonbashi, Muromachi 2-Chome, Chuo-Ku, Tokyo, 103-0022, Japan
Name of section : Reagent division, catalog and products information section
Telephone number : +81-3-6214-1090
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Mail address : BC32@gms.kanto.co.jp
MSDS No. : 17014

2. Summary of danger and Hazard

GHS classification

Physical and chemical hazard

Flammable solids : Out of category

Pyrophoric solids : Out of category

Self-heating substances and mixtures
: Out of category

Oxidizing solids : Out of category

Human health hazard

Acute toxicity(oral) : Category 4

Pictogram or symbol



Signal word : Warning

Hazard statement : Harmful if swallowed

Cautions

Safety measurements : Do not eat, drink or smoke when using this product.
Wash hands thoroughly after handling.

First-aid measures : If swallowed: Rinse mouth. Get medical treatment if you feel unwell.

Disposal : Dispose of contents and containers appropriately in accordance with related regulations.

3. Composition/Information on ingredients

Substance/Mixture : Substance

Chemical name or commercial name

: Germanium(IV) oxide

Synonyms : Germanium dioxide

Ingredients and composition

: Germanium(IV) oxide min. 99.5%

Chemical formula : GeO₂

CAS No. : 1310-53-8

TSCA Inventory : Registered

EINECS No. : 2151808

4. First aid measures

Inhalation : Remove the victim to fresh air, and make him blow his nose and gargle.

Skin contact : Wash the affected areas under running water.

Eye contact : Wash the affected areas under running water.

Ingestion : Give the victim water or salt water and induce vomiting. If necessary, get medical attention.

5. Fire fighting measures

Extinguishing media : This product is noncombustible.

Prohibited extinguishing media
: None

Particular fire fighting : Move containers from fire area if it can be done without risk, if not possible, apply water from a safe distance to cool and protect surrounding area.

Protection for firefighters
: Firefighters should wear protective equipment.

6. Accidental release measures

Cautions for personnel : Wear proper equipment and avoid contact with skin and inhalation of dust. Keep away personnel except for authorized ones from spillage area by stretching ropes.

7. Cautions of handling and storage

Handling

Engineering measures : If necessary, wear proper protective equipment not to contact with skin or inhale the dust.

Storage

Adequate storage condition
: Store in a dark, cool place and tightly closed.

Safety adequate container materials
: Glass, polyethylene, polypropylene

8. Exposure control/Personal protection

Engineering measures : Use only with adequate ventilation and in closed systems.

Control parameters

ACGIH(2009) : Not established

Protective equipment

Respiration protective equipment
: If necessary, wear dust mask

Hands protective equipment
: Impervious protective gloves

Eyes protective equipment
: Safety goggles

9. Physical and chemical properties

Appearance : Powder
Color : White
Odor : Odorless
Boiling point : Not available
Melting point : 1115°C
Specific gravity : 6.2g/ml (20°C)
Solubility
Solubility in solvents : Water ; Insoluble

10. Stability and reactivity

Stability : Stable under normal usage.
Reactivity : Nothing particular

11. Toxicological information

Acute toxicity : Harmful if swallowed(category 4)
Dermal : Not possible to classify because of insufficient data.
Inhalation(vapor) : Not possible to classify because of insufficient data.
Inhalation(dust, mist) : Not possible to classify because of insufficient data.
rat oral LD50=1250mg/kg
Skin corrosiveness : Not possible to classify because of insufficient data.
Irritation to skin, eyes : Not possible to classify because of insufficient data.
Respiratory sensitization or Skin sensitization
: Respiratory sensitization : Not possible to classify because of insufficient data.
Skin sensitization : Not possible to classify because of insufficient data.
Mutagenicity : Not possible to classify because of insufficient data.
Carcinogenic effects : Not possible to classify because of insufficient data
Effects on the reproductive system
: Not possible to classify because of insufficient data.
Specific target organ systemic toxicity single exposure
: Not possible to classify because of insufficient data.
Specific target organ systemic toxicity repeated exposure
: Not possible to classify because of insufficient data.
Aspiration hazard : Not possible to classify because of insufficient data.

12. Ecological information

Ecotoxicity
Fish toxicity : Acute aquatic toxicity : Not possible to classify because of insufficient data.
Chronic aquatic toxicity : Not possible to classify because of insufficient data.
Rediualbility and degradability

- Ecoremediability : Non biodegradability
: Not available
13. Disposal consideration
Residual disposal : Bury in a landfill site approved for the disposal of chemical and hazardous wastes. Or entrust approved waste disposal companies with the disposal.
14. Transport information
UN class : Not applicable
15. Regulatory information
Ensure this material in compliance with federal requirements and ensure conformity to local regulations.
16. Other information
References Dangerous Properties of Industrial Materials, 6th ed. N. I. Sax Van Nostrand Reinhold Company (1984)
Handbook of 15710 Chemical Products, The Chemical Daily Co. (2010)
IGSC Card (2009)

The information contained herein is based on several references and the present state of our knowledge. However the MSDS does not always cover all information about the product, handle the product carefully. The information is intended to ordinary usage, in case of particular handlings, conduct appropriate safety measurements. The information herein is only provision of information, and it does not represent a guarantee the properties of the product.