

SAFETY DATA SHEET

Date Printed: 05/19/2024 **Date Revised:** 01/15/2022

SECTION 1. IDENTIFICATION

Product Identifier: (4N) 99.99% Hexaphenyldigermanium(IV)

Product Code: GE-OMX-04

CAS Number: 2816-39-9

Relevant identified uses of the substance: Scientific research and development

Supplier details:

American Elements 10884 Weyburn Ave. Los Angeles, CA 90024 Tel: +1 310-208-0551

Fax: +1 310-208-0351

Emergency telephone number:

+1 800-424-9300

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture
GHS-US classification
Not classified
GHS Label elements, including precautionary statements
GHS US labeling
No labeling applicable
Hazards not otherwise classified (HNOC)
No additional information available
Unknown acute toxicity (GHS US)

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Not applicable

Substance type : Mono-constituent Name : HEXAPHENYLDIGERMANE

CAS-No.: 2816-39-9

Mixtures Not applicable

SECTION 4. FIRST AID MEASURES

Description of first aid measures

First-aid measures general: Remove contaminated clothing and shoes. In case of accident or if you feel unwell, seek

medical advice immediately (show the label where possible). If possible show this sheet; if not available show packaging or label.

First-aid measures after inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel

unwell, seek medical advice.

First-aid measures after skin contact: Wash with plenty of soap and water.

First-aid measures after eye contact: Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Get medical advice/attention.

First-aid measures after ingestion: Never give anything by mouth to an unconscious person. Get medical advice/attention.

Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation: May cause irritation to the respiratory tract.

Symptoms/effects after skin contact : May cause skin irritation.

Symptoms/effects after eye contact : May cause eye irritation.

Symptoms/effects after ingestion : May be harmful if swallowed.

Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5. FIREFIGHTING MEASURES

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Water spray. Water fog. Foam. Carbon dioxide. Dry chemical.

Specific hazards arising from the chemical

Fire hazard: Irritating fumes and organic acid vapors may develop when material is exposed to elevated temperatures or open flame.

Special protective equipment and precautions for fire-fighters

Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire.

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Avoid contact with skin and eyes. Do not breathe dust.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Emergency procedures: Evacuate unnecessary personnel.

For emergency responders

Protective equipment: Equip cleanup crew with proper protection.

Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

Methods and material for containment and cleaning up

Methods for cleaning up: Clean up any spills as soon as possible, using an absorbent material to collect it. Sweep or shovel spills into appropriate container for disposal.

See Heading 8. Exposure controls and personal protection.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

Precautions for safe handling: Avoid contact with skin and eyes. Do not breathe dust. Provide local exhaust or general room

ventilation to minimize exposure to dust.

Hygiene measures: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed.

Incompatible materials: Oxidizing agent.

Storage area: Store in a well-ventilated place. Store away from heat

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Appropriate engineering controls

Appropriate engineering controls: Provide local exhaust or general room ventilation.

Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Hand protection:

Neoprene or nitrile rubber gloves

Eye protection:

Chemical goggles. Contact lenses should not be worn

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

NIOSH-certified dust and mist (orange cartridge) respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state: Solid Appearance: Powder.

Molecular mass: 607.82 g/mol

Color: White.

Odor: No data available

Odor threshold : No data available Refractive index : No data available

pH: No data available

Relative evaporation rate (butyl acetate=1): No data available

Melting point: 340 °C

Freezing point : No data available

Boiling point : 271 °C @ 1 mm Hg - sublimes

Flash point : > 200 °C

Auto-ignition temperature : No data available

Decomposition temperature : No data available Flammability (solid, gas) : No data available Vapor pressure : < 0.001 mm Hg @ 25°C

Relative vapor density at 20 °C : No data available

Relative density: No data available

% Volatiles: 0 %

Solubility: Insoluble in water. Log Pow: No data available Log Kow: No data available

Viscosity, kinematic : No data available Viscosity, dynamic : No data available Explosive properties : No data available Oxidizing properties : No data available Explosion limits : No data available

Other information

No additional information available

SECTION 10. STABILITY AND REACTIVITY

Reactivity

No additional information available

Chemical stability

Stable.

Possibility of hazardous reactions No additional information available

Conditions to avoid

Heat. Open flame. Sparks.

Incompatible materials

Oxidizing agent

Hazardous decomposition products

Germanium and its oxides. Organic acid vapors.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity: Not classified

Skin corrosion/irritation: Not classified

Serious eye damage/irritation : Not classified Respiratory or skin sensitization : Not classified

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified Reproductive toxicity: Not classified

Specific target organ toxicity – single exposure : Not classified

Specific target organ toxicity - repeated

exposure: Not classified

Aspiration hazard: Not classified

Symptoms/effects after inhalation: May cause irritation to the respiratory tract.

Symptoms/effects after skin contact: May cause skin irritation. Symptoms/effects after eye contact: May cause eye irritation. Symptoms/effects after ingestion: May be harmful if swallowed.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity

No additional information available

Persistence and degradability

No additional information available

Bioaccumulative potential

No additional information available

Mobility in soil

No additional information available

Other adverse effects

Effect on the ozone layer: No additional information available

SECTION 13. DISPOSAL CONSIDERATIONS

Toxicity

No additional information available

Persistence and degradability

No additional information available

Bioaccumulative potential

No additional information available

Mobility in soil

No additional information available

Other adverse effects

Effect on the ozone layer: No additional information available

SECTION 14. TRANSPORT INFORMATION

UN number

Not regulated for transport.

UN proper shipping name

Not applicable

Additional information

Other information: No supplementary information available.

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15. REGULATORY INFORMATION

US Federal regulations

HEXAPHENYLDIGERMANE (2816-39-9)

TSCA Exemption/Exclusion CAUTION: This material is supplied for research and development purposes subject to the R&D exemption under TSCA, 40 CFR 720.36, and must meet the requirements of the exemption, including supervision by a "technically qualified individual" as defined by 40 CFR 720.3(ee). The use of this material for "commercial purposes" as defined by 40 CFR 720.3(r) is

not permitted in the United States. Hexaphenyldigermane (2816-39-9) Not listed on the United States TSCA (Toxic Substances Control Act) inventory International regulations CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

No additional information available

US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental

and/or reproductive harm

16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.