Cylinder Gas Geh4 Germane Gas 44L Electronic Grade Germane Gas

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: CMC
- Certification: COA
- Model Number: Geh4
- Minimum Order Quantity: 1kg
- Price: US $100/kg
- Packaging Details: Cylinder/Tank
- Delivery Time: 15 days
- Payment Terms: L/C, T/T
- Supply Ability: 5000kg/month

Product Specification

- Product Name: Germane Gas
- Transport: By Sea
- Appearance: Colorless
- Transport Package: Cylinder
- Specification: 44L
- Trademark: CMC
- Origin: China
- CAS No.: 7782-65-2
- Formula: Geh4
- Constituent: Industrial Pure Air
- Grade Standard: Industrial Grade
- Chemical Property: Poisonous Gases
- Purity: 99.999 %
- Customization: Available | Customized Request
- Highlight: **Geh4 Specialty Gas Cylinder,**

More Images

Our Product Introduction

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Product Description

Geh4 Germane Specialty Gas Cylinder 44L Electronic Grade

Germane gas (GeH4) is a colorless, flammable, and highly toxic gas. It is a compound of the element germanium (Ge) and hydrogen (H). Here are some key points about germane gas:

Chemical Composition: Germane gas is composed of one germanium atom bonded to four hydrogen atoms (GeH4).

Properties: Germane gas possesses several important properties:

Toxicity: Germane gas is highly toxic and poses a significant health hazard. Inhalation or exposure to germane gas can cause severe health effects, including respiratory problems, lung damage, and even death. Proper safety precautions and handling procedures are essential when working with germane gas.

Flammability: Germane gas is flammable and can form explosive mixtures with air. It should be handled and stored with caution, away from ignition sources.

Volatility: Germane gas is a volatile compound, meaning it evaporates easily at room temperature.

Production: Germane gas can be produced through different methods, including the reaction of germanium tetrachloride (GeCl4) with hydrogen gas (H2) or the reaction of germanium metal with hydrochloric acid (HCl) followed by reduction with hydrogen.

Uses: Germane gas has some applications in various fields:

Semiconductor Industry: Germane gas is used in the production of semiconductors, particularly in the manufacturing of germanium-based devices and components. It can be used as a precursor in chemical vapor deposition (CVD) processes to deposit germanium thin films or as a dopant to introduce germanium into semiconductor materials.

Research and Development: Germane gas is utilized in research laboratories for its unique properties and its potential applications in materials science and electronics.

Safety Considerations: Germane gas is highly toxic and poses significant health risks. It should be handled with extreme care in a well-ventilated environment or under controlled conditions. Personal protective equipment, including respiratory protection, should be used when working with germane gas. Proper storage, handling, and disposal procedures should be followed to minimize exposure and prevent accidents.

It is important to note that due to its toxicity and flammability, handling and using germane gas require specialized knowledge, equipment, and facilities. It is recommended to consult with experts and adhere to applicable safety regulations and guidelines when working with germane gas.

Model NO.	GeH4	Constituent	Germane 99.999%
Grade Standard	Electronic Grade	Chemical Property	Inflammable Gas
Trademark	CMC	Transport Package	44L
Specification	99.999	Origin	China

Germane - (GeH4)

Description

Germane is a flammable , colorless gas with characteristic pungent ,nauseating odor .Its boiling point is - 90°C. It is unstable and can decompo se explosively when heated to greater than 330°C.

Specifications	
Purity , %	99.999
Oxygen + Argon	≤0.5 ppmv
Nitrogen	≤2.0 ppmv
Carbon Dioxide	≤2.0 ppmv
Carbon Monoxide	≤1.0 ppmv
Methane	≤1.0 ppmv
Water	≤1.0 ppmv
Chlorogermanes	≤5.0 ppmv
Digermane*	≤20.0 ppmv
Germoxanes	≤5.0 ppmv
Hydrogen*	≤50.0 ppmv
Trigermane	≤1.0 ppmv

Ship	
DOT Shipping Name	Germane
DOT Classification	2.3
DOT Label	Toxic Gas, Flammable Gas
UN Number	UN2192
CAS No.	7782-65-2
CGA/DISS/JIS	350/632/W22-14L
Shipped as	Compressed Gas

Technical Information	
Cylinder State @ 21.1°C	Gas
Flammable Limits In Air	0.5-100%
Auto Ignition Temperature (°C)	54.4

Molecular Weight (g/mol)	76.62
Specific gravity (air =1)	2.65
Critical Temperature (°C)	34.8
Critical Pressure (psig)	

Applications

Used for the deposition of epitaxial and amorphous silicon - germanium alloys , and as a component for PECVD of (Si, Ge)O2 films with controllable refractive index for photonic .

Detailed Photos

Company Profile

Shanghai Kemike Chemical Co., Ltd is staffed by trained personnel, combine many years experience in Gas industry .We supply cylinder gas, electronic gas, etc ., and the gas holder, panel, valves and fittings and other equipment, parts and engineering services to our customers in China and worldwide; The products are involved in various industrial fields, such as

semiconductor chip, solar cell, LED, TFT-LCD, optical fiber, glass, laser, medicine , etc., Our mission is to partner with our global customers to provide support, solutions and quality products that are innovative,reliable, and safe.
Our products mainly include: H2, O2, N2, Ar, CO2, propane, acetylene, helium, laser mixed gas, SiH4, Sih2cl2, SiHCL3, SiCL4, NH3, CF4, NF3, SF6, HCL, N2O, doping mixed gas (TMB, PH3, B2H6) and other electronic gases.

SiCl4	NH3	NH3	CH3F	SiH4	Kr	H2S	WF6	F6+Cl2
4MS	C3F8	C3F8	TEOS	CH4	PH3	SF6	C2	HCl+Ne
CF4	C4F8	SiH2						TMB+H2
SiF4	C3H8	Cl2						He +As
BBr3	C3H6	DCE						Ge+Se
POCl3	N2	SO2						D+B
BCl3	D2	CO2						CO+NO
SiHCl3	CH2F2	HF	AsH3	C2H4	C2H2	HBr	COS	Ar+O2
TMAl	DMZn	DEZn	GeH4	C2H6	B2H6	H2Se	GeCl4	Xe+NO

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