China Cylinder Gas Inflammable Compressed High Purity Germane Geh4 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 gas Cylinder**, **Compressed geh4 gas**,

More Images

Our Product Introduction

for more products please visit us on gascylindertank.com

Product Description

Inflammable Compressed Germane Geh4 Gas Cylinder Tank

Germane gas (GeH4) is a colorless, flammable, and highly toxic gas. It belongs to the group of compounds known as hydrides, which are formed by combining hydrogen with various elements. 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 significant health hazards. Inhalation of germane gas can cause severe health effects, including respiratory distress, eye and skin irritation, and damage to the central nervous system.

Flammability: Germane gas is flammable and can form explosive mixtures with air. It has a wide flammable range and can ignite at relatively low temperatures or when exposed to a flame or spark.

Stability: Germane gas is unstable and can decompose or react with other substances under certain conditions.

Production: Germane gas can be produced by various methods, including:

Direct Combination: Germane gas can be produced by combining germanium tetrachloride (GeCl4) with hydrogen gas (H2) in the presence of a reducing agent.

Decomposition: Germane gas can also be generated by the decomposition of certain germanium hydride compounds through thermal or chemical reactions.

Uses: Germane gas has limited practical applications due to its toxicity and instability. Some notable uses include:

Semiconductor Manufacturing: Germane gas is used in the production of semiconductors and thin-film devices. It is employed as a dopant gas to introduce germanium atoms into silicon-based materials during the fabrication process.

Research and Laboratory Applications: Germane gas is sometimes used in research laboratories for specific experiments or as a precursor for the synthesis of certain germanium-containing compounds.

Safety Considerations: Due to its toxicity and flammability, germane gas requires careful handling and strict safety precautions. Proper ventilation, personal protective equipment, and adherence to safety guidelines are essential when working with germane gas. Additionally, storage and transportation should be done in compliance with applicable regulations.

It is important to note that germane gas should only be handled by trained professionals in properly equipped facilities due to its hazardous nature.

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 decompose 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


锗烷
GeH4
锗烷
GeH4
锗烷
GeH4
锗烷
GeH4

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

Shanghai Kemike Chemical Co.,Ltd
+86 18762990415 williamchen@cmc-chemical.com gascylindertank.com