China Cheap Electronic Grade Ultra High Purity 99.9999% 6n Cylinder Gas Silane

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: CMC
- Certification: COA
- Model Number: sih4
- Minimum Order Quantity: 1kg
- Price: US $45/kg
- Packaging Details: Cylinder/Tank
- Delivery Time: 15 days
- Payment Terms: L/C, T/T
- Supply Ability: 50000kg/month

Product Specification

- Product Name: Silane
- Cylinder Standard: GB/ISO/DOT
- Cylinder Pressure: 12.5MPa/15MPa/20MPa
- Purity: 99.9999%
- Model No.: Silane Gas
- Transport Package: Y-Cylinder, T-Drum, T-Cylinder, T-Drum, Tt, Tanker
- Specification: 20L, 40L, 280L And Customizable
- Trademark: CMC
- Origin: Suzhou, China
- HS Code: 2812190091
- Supply Ability: 50000kg/Month
- CAS No.: 7803-62-5
- Formula: Sih4
- EINECS: 232-263-4

More Images

Product Description

Product Description

Silane refers to a group of chemical compounds that contain a silicon atom bonded to hydrogen atoms. The most common and simplest form of silane is monosilane (SiH4). Here are some key points about silane:

Structure: Silane compounds have a general formula of SiH_4, where a silicon atom is bonded to four hydrogen atoms. The silicon atom is at the center of a tetrahedral structure, with each hydrogen atom bonded to one of the silicon's four valence electrons.

Properties: Silane is a colorless, flammable gas with a distinct odor. It is less dense than air and can form explosive mixtures with air when exposed to certain conditions. Silane is highly reactive and can spontaneously ignite in the presence of oxygen.

Production: Silane can be produced through several methods, including the reaction of silicon with hydrogen or the hydrolysis of silicon halides. Industrial-scale production often involves the pyrolysis of silicon tetrachloride ($SiCl_4$) with hydrogen gas.

Applications: Silane has various applications, including:

Semiconductor Industry: Silane is a crucial precursor gas for the deposition of thin films in semiconductor device fabrication. It is commonly used in processes such as chemical vapor deposition (CVD) and plasma-enhanced CVD (PECVD). Silane is used to deposit silicon films for insulation, passivation, and photovoltaic applications.

Silicones: Silane derivatives are used in the production of silicones, which are a class of polymers with diverse applications. Silanes with functional groups can be used as cross-linking agents to modify the properties of silicone polymers, such as increasing their adhesion or enhancing their water repellency.

Surface Treatment: Silane coupling agents are used to improve the adhesion between different materials, such as glass, metals, or fillers, and organic polymers. They are applied as coatings or additives to enhance the compatibility and bonding strength between materials.

Chemical Synthesis: Silane compounds are used as reducing agents in various chemical reactions. They can be employed to reduce metal halides or metal oxides to produce pure metals or metal alloys.

It's important to note that silane is a highly reactive and potentially hazardous gas. Proper safety precautions must be taken when handling, storing, and using silane due to its flammability and reactivity.

Basic Info.

Model NO.	Sih4	Boiling Point	-112 ºC
Density	1.34 Kg/M³	Melting Point	-185 ºC
Cylinder Pressure	12.5MPa/15MPa/20MPa	Transport Package	47L/440L/ISO Tank
Specification	47L/440L/ISO Tank	Origin	China
HS Code	2931900090	Production Capacity	20, 000tons/Year

Specification:

CAS No.: 7803-62-5
EINECS No.: 232-263-4
UN No.: UN2203
Purity: 99.9999%
Dot Class: 2.1
Appearance: Colorless
Grade Standard: Electronic Grade

Specification	99.9999%
Carbon Monoxide	≤ 0.05 ppm
Carbon Dioxide	≤ 0.05 ppm
Total chloride	≤ 0.1 ppm
Methane	≤ 0.05 ppm
C2-C4	≤ 0.1 ppm
Nitrogen	≤ 0.5 ppm
Oxygen	≤ 0.05 ppm
Moisture	≤ 0.1 ppm
Silyl Ether	≤ 0.1 ppm
Methyl Silane	≤ 0.1 ppm
Disilane	≤ 0.3 ppm
Hydrogen	≤ 20 ppm
Aluminum	≤ 0.02 ppba
Antimony	≤ 0.02 ppba
Arsenic	≤ 0.02 ppba
Gallium	≤ 0.02 ppba
Boron	≤ 0.02 ppba
Phosphorus	≤ 0.02 ppba
Iron + Chromium + Nickel + Copper + Zinc	≤ 1 ppba

Detailed Photos


硅烷SiH4


液化硅烷SiH4

Packaging & Shipping

Cylinder Specifications		Contents
Cylinder Capacity	Valve	Weight
47L	DISS632	10 kgs
440L	DISS632	120 kg

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.

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