Electronic Industrial Grade Cylinder Gas High Purity Sih4 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, Western Union
- Supply Ability: 50000kg/month

Product Specification

- Product Name: Silane
- Valve: Diss632
- Appearance: Colorless, Garlic Smell
- Melting Point: -185 ºC
- Cylinder Pressure: 12.5MPa/15MPa/20MPa
- Cylinder Standard: GB/ISO/DOT
- 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

More Images

Product Description

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

Structure: Silane compounds consist of a silicon atom bonded to hydrogen atoms. Monosilane (SiH4) has a tetrahedral structure, with the silicon atom at the center and four hydrogen atoms surrounding it.

Properties: Silane is a colorless, flammable gas with a pungent odor. It is less dense than air and can form explosive mixtures when exposed to air or other oxidizing agents. Silane is highly reactive and can react with water, oxygen, and various other compounds.

Production: Silane can be produced through several methods, including the reaction of silicon with hydrogen gas or the hydrolysis of silicon halides. Industrial-scale production of silane often involves the reaction of metallurgical-grade silicon with hydrogen.

Applications: Silane has diverse applications in various industries:

Semiconductor Industry: Silane is a crucial precursor gas in the production of silicon-based materials, such as silicon wafers and thin-film transistors. It is used in chemical vapor deposition (CVD) processes to deposit silicon films.

Solar Energy: Silane is employed in the manufacturing of silicon-based solar cells. It is used as a precursor gas for the deposition of amorphous and polycrystalline silicon layers in solar panel production.

Chemical Industry: Silane derivatives are utilized as coupling agents, adhesion promoters, and surface modifiers in the formulation of coatings, adhesives, sealants, and plastics. They can enhance the bonding between different materials or improve surface properties.

Specialty Chemicals: Silane compounds find applications in specialty chemicals, such as silane coupling agents used in rubber processing, silane crosslinkers in silicone elastomers, and silane primers in dental materials.

Gas Chromatography: Silane gas is employed as a carrier gas or as a reagent for derivatization in gas chromatography (GC) analysis.

It is important to note that silane is a highly reactive and potentially hazardous compound. Proper safety precautions, such as handling, storage, and usage in well-ventilated areas, should be followed when working with silane.

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.

Shanghai Kemike Chemical Co.,Ltd

+86 18762990415 williamchen@cmc-chemical.com gascylindertank.com