

六氟乙烷 Hexafluoroethane

1、产品介绍 Product introduction

六氟乙烷(C₂F₆)，又称全氟乙烷，是一种无色、无味、不可燃的惰性气体。六氟乙烷熔点为-100.6℃，沸点为-78.2℃，微溶于水。六氟乙烷作为干腐蚀剂具有边缘侧向侵蚀现象极微、高蚀刻率及高精确性的优点，可以极好地满足线宽较小的制程要求，被广泛应用于半导体制作过程中。

Hexafluoroethane (C₂F₆), also known as perfluoroethane, is a kind of colorless, odorless, non-flammable inert gas. Its melting point is 100.6 °C, boiling point is 78.2 °C, slightly soluble in water. Due to its non-toxic, odorless and high stability, hexafluoroethane is widely used in the semiconductor manufacturing process. Hexafluoroethane, as a dry etchant, has the advantages of very small edge-side etching, high etching rate and high accuracy, which can meet the requirements of semiconductor manufacturing process for small linewidth.

2、产品指标 Quality specification

项目 Items	单位 Unit	指标 Indexs
C ₂ F ₆	Vol.%	≥99.999
O ₂ +Ar	Vol.ppm	< 1
N ₂	Vol.ppm	< 5
CO	Vol.ppm	< 0.5
CO ₂	Vol.ppm	< 0.5
H ₂	Vol.ppm	< 0.5
卤代烃 Halohydrocarbon	Vol.ppm	< 5
CH ₄	Vol.ppm	< 1
H ₂ O	Vol.ppm	< 2
酸度 Acidity (Measured by HF)	Wt. ppm	< 0.1
总杂质含量 Total impurity content	Mol.ppm	≤10

3、产品用途 Application

电子级高纯六氟乙烷主要在半导体器件制造过程中，作为蚀刻剂、化学气相沉积（CVD）后的腔体清洗剂等使用，同时也可作为高介电强度制冷剂和电气设备的气体绝缘介质使用。

Electronic grade hexafluoroethane is mainly used in the manufacturing process of semiconductor materials and semiconductor devices as etching agent and cleaning agent, as well as insulation gas and high dielectric strength coolant.

4、包装、贮藏 Packaging and storage

六氟乙烷充装在经特殊处理的洁净、干燥的无缝高压气瓶中，气瓶容积分别为 4L、8L、10L、12.5L、40L 等。具体包装规格可根据用户需求定制更改。

Hexafluoroethane is filled in clean and dry seamless cylinders with special treatment. The cylinder volumes are 4L, 8L, 10L, 12.5L and 40L etc. Packaging specifications can be customized according to customers' requirements.