

四氟化钛 Titanium Tetrafluoride

1、产品介绍 Product introduction

四氟化钛，又称氟化钛，分子式为 TiF_4 ，分子量为 123.86，熔点为 $284^{\circ}C$ ，是一种具有吸湿性的白色粉末。四氟化钛溶于冷水中可分解，溶于硫酸、乙醇和吡啶，不溶于乙醚。四氟化钛在微电子工业、石化等行业中具有重要的应用。

Titanium tetrafluoride is also called titanium fluoride, its molecular formula is TiF_4 , molecular weight is 123.86, melting point is $284^{\circ}C$. Titanium tetrafluoride is a kind of hygroscopic white powder. Titanium tetrafluoride decomposes when it dissolves in cold water, it is soluble in sulfuric acid, ethanol and pyridine but it is insoluble in ether. Titanium tetrafluoride has important applications in microelectronics industry and petrochemical industry.

2、产品指标 Quality specification

项目 Items	单位 Units	指标 Index
四氟化钛 Titanium tetrafluoride (TiF_4) \geq	wt.%	98.5
重金属含量 Heavy metal content \leq	wt.%	0.1
氯化物含量 Chloride content \leq	wt.%	0.15
氟硅酸盐含量 Fluorosilicate content \leq	wt.%	0.2
铁含量 Iron content \leq	wt.%	0.1
硫酸盐含量 Sulphate content \leq	wt.%	0.1

3、产品用途 Application

在电子工业中，四氟化钛可用于成膜材料或离子注入掺杂，形成硅化钛或钛膜，制作低电阻、高熔点的电路互联线和栅极。四氟化钛在石化行业中可用作催化剂。

In the electronics industry, titanium tetrafluoride can be used for film forming materials and ion implantation doping, and consequently titanium silicide or titanium film is formed to produce interconnects and grid electrode with low resistance and high melting point. Titanium tetrafluoride can be used as catalyst in petrochemical industry.

4、包装、贮藏 Packaging and storage

四氟化钛储存于密封的铜质容器中，包装规格为 10g、100g，具体包装规格可根据用户需求定制更改。四氟化钛储存于阴凉、通风的库房，库温不宜超过 37℃，保持容器密封，远离火种、热源。储区应备有泄漏应急处理设备和合适的收容材料。

Titanium tetrafluoride is stored in sealed copper containers with packing specifications of 10g and 100g. Specific packaging specifications can be customized according to users' requirements. Titanium tetrafluoride is stored in shady and ventilated storeroom, temperature of storeroom is lower than 37℃, container is keeping seal away from fire and heat source. The storage area shall be equipped with equipment for emergency.