

# 硼 11 酸三乙酯 Triethyl Borate11

## 1、产品介绍 Product introduction

硼 11 酸三乙酯又称硼酸乙酯、三乙氧基硼，化学式为  $C_6H_{15}BO_3$ ，分子量为 145.99，熔点为  $-84.5^{\circ}C$ ，沸点为  $117.5^{\circ}C$ 。硼 11 酸三乙酯为无色透明液体，有轻度气味，有显著的热稳定性，能与乙醇、乙醚混溶，遇水分解。硼 11 酸三乙酯可作为掺杂源掺入到硅片表面薄层中，并使其达到规定的数量和符合要求的分布形式，以改变半导体的电化学性质，可以制造 PN 结、电阻、互联线等。

Triethyl borate is also called ethyl borate , or triethoxy-boron, its chemical formula is  $C_6H_{15}BO_3$ , molecular weight is 145.99, melting point is  $84.5^{\circ}C$ , boiling point is  $117.5^{\circ}C$ . Triethyl borate is colorless transparent liquid, which has a mild scent, significant thermostability, it is miscible with ethanol, ethyl ether In order to change the electrochemical properties of semiconductors, triethyl borate11 can be used as a doping source to dope into the thin layer on the surface of the silicon wafer, which makes silicon wafer reach specified quantity and required distribution form, and then PN junction, resistance and interconnection line etc. can be manufactured.

## 2、产品指标 Quality specification

项目 Items	单位 Units	指标 Index
纯度 Purity≥	%	99.9999995 (8.5N)
主含量 Main content≥	%	99.99
颗粒数 Quantity of particles (≥0.3μm max)	p/ml	7
颗粒数 Quantity of particles (≥0.5μm max)	p/ml	5
色度 Chroma≤	APHA	5
水份 Moisture≤	ppm	20
氯化物 Chloride≤	ppb	50

### 3、产品用途 Application

硼 11 酸三乙酯可用于半导体元器件的制造中，以改变半导体的电化学性质，也可用作其他有机硼化物的合成、增塑剂及焊接助熔剂。

Triethyl borate<sup>11</sup> can be used in the manufacture of semiconductor components to change the electrochemical properties of semiconductor, and it also can be used in the synthesis of other organic boron compounds, plasticizer and welding flux.

### 4、包装、贮藏 Packaging and storage

电子级硼酸三乙酯贮存在标准无缝钢瓶中，包装规格为 19L，具体包装规格可根据用户需求定制更改。产品储存于干燥、通风良好的库房中，禁止堆放，远离火种、热源，防止雨淋、阳光直射，应与氧化剂、食用化学品分开存放。

Electronic grade triethyl borate is stored in standard seamless cylinders, the packing specification is 19L, specific packaging specifications can be customized according to users' requirements. The product is stored in dry and ventilated storeroom away from fire and heat source, which is forbidden to stack. Protecting against rain and direct sunlight. It should be separately stored with oxidizing agent and edible chemicals.