

# 全氟三丙胺 Perfluorotripropylamine

## 1、产品介绍 Product introduction

全氟三丙胺 (C<sub>9</sub>F<sub>21</sub>N) 是一种重要的全氟代叔胺类化合物，为无色透明液体，不溶于水、乙醇，在丙酮、乙醚、氯仿、苯及石油醚等有机溶剂中的溶解度也很小，但能与氟氯烷烃混溶。全氟三丙胺具有非常优异的化学稳定性，即使在加热的情况下，强酸、强碱、强氧化剂对它都不起作用。全氟三丙胺具有极高的电绝缘性，极低的表面张力，耐热性好，在250°C以上的温度下才会有微量分解。全氟三丙胺对人体完全无毒，而且能溶解携带大量的氧气和二氧化碳，是构成现代医学领域应用的人造血浆的主要成分之一。

Perfluorotripropylamine (FTPA, C<sub>9</sub>F<sub>21</sub>N) is an important perfluoro-tertiary amines compound. It is a kind of colorless transparent liquid, it is insoluble in water and ethanol, and has a small solubility in acetone, ethyl ether, chloroform, benzene, petroleum ether and other organic solvents, but it is miscible with chlorofluorocarbons. FTPA has excellent chemical stability, it can not react with strong acid, base and oxidant even in the case of heating. FTPA has a very high electrical insulation, low surface tension, good heat resistance, it decomposes slightly at the temperature above 250°C. FTPA is completely non-toxic for human body, and can dissolve and carry a large amount of oxygen and carbon dioxide, which is one of the main components of artificial plasma used in modern medical field.

## 2、产品指标 Quality specification

项目 Items	单位 Units	指标 Indexs		
全氟三丙胺 FTPA	wt%	≥90%	≥95%	≥99%
C <sub>7</sub> -C <sub>9</sub> 全氟杂质含量 C <sub>7</sub> -C <sub>9</sub> Perfluorine impurity content	wt%	≤9.8	≤4.8	≤0.98
含氢未完全氟化杂质含量 Impurity content with hydrogen of incomplete fluorination	wt%	≤0.1	≤0.1	≤0.01
沸程 Boiling range	℃	110-128℃	120-128℃	127-128℃
灼烧残渣 Ignition residue	wt%	≤0.1	≤0.1	≤0.01
介电常数 Dielectric constant	C <sup>2</sup> /(N*m <sup>2</sup> )	1.8	1.9	1.9
密度 Density	g/cm <sup>3</sup>	1.72-1.76	1.73-1.75	1.73-1.74

## 3、产品用途 Application

全氟三丙胺是构成人造血浆的主要成分之一。全氟三丙胺还可作为现代电子工业中理想的工作介质，用来检测电子元器件的产品性能。此外，全氟三丙胺在绝缘液、热传导液、仪器仪表的抗腐蚀隔离、传动液、抗氧化润滑剂、精密清洗等方面也有着广泛的应用。

FTPA is one of the main components of artificial plasma. FTPA can also be used as an ideal working medium in modern electronic industry to detect the performance of electronic components. In addition, FTPA is also widely used in insulating liquids, heat transfer fluids, anti-corrosion isolation of instruments and apparatus, transmission fluid, anti-oxidation lubricant, precision cleaning and other aspects.

## 4、包装、贮藏 Packaging and storage

全氟三丙胺包装规格如下：小包装为 500g 塑料瓶包装，5kg 塑料桶包装，25kg、50kg 钢塑桶包装。具体包装规格可根据用户要求定制更改。全氟三丙胺储存于阴凉、通风的库房，远离火种、热源，应与氧化剂、食用化学品、碱金属

分开存放，切忌混储。

Packing specifications of FTPA include plastic bottle of 500 g, plastic cask of 5 kg, steel-plastic cask of 25 kg, 50 kg. Specific packaging specifications can be customized according to user requirements. FTPA is stored in a shady and ventilated storeroom away from fire and heat source. It should be separately stored with oxidizing agent, edible chemicals and alkali metal.