

全氟辛烷 Perfluorooctane

1、产品介绍 Product introduction

全氟辛烷 (C₈F₁₈) 熔点为-25°C，沸点为103°C，不燃，无毒，化学稳定性高，为无色透明略带煤油气味的液体。全氟辛烷不溶于水、乙醇、醋酸、甲醛，但可溶解于乙醚、丙酮、二氯甲烷、氯仿及氟氯烷烃。全氟辛烷具有较低的表面张力和较高的介电强度，耐热性非常好，分解温度超过800°C。全氟辛烷可以溶解大量的氧气和二氧化碳，可与其它氟碳化合物配伍用做人工血液和离体后器官保存液等。

Perfluorooctane (C₈F₁₈) is a kind of colorless, transparent and slight kerosene-scented liquid with melting point of -25°C, boiling point of 103°C, it is non-flammable, non-toxic with high chemical stability. Perfluorooctane is insoluble in water, ethanol, acetic acid and formaldehyde, but it's soluble in ether, acetone, dichloromethane, chloroform and chlorofluorocarbons. Decomposition temperature of perfluorooctane with low surface tension, high dielectric strength and good heat resistance is more than 800°C. Perfluorooctane can dissolve a large amount of oxygen and carbon dioxide, and can be used as artificial blood and preserving fluid of organ in combination with other fluorocarbons.

2、产品指标 Quality specification

项目 Items	单位 Units	指标 Indexs		
全氟辛烷 Perfluorooctane	wt%	≥90%	≥95%	≥99%
C ₆ -C ₈ 全氟杂质含量 C ₆ -C ₈ 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	°C	96-105°C	100-105°C	104-105°C
酸度 (20°C) Acidity	pH	6.2-7.1	6.4-7.0	6.8-7.0
折光率 (20°C) Refractive index		1.26	1.27	1.27
密度 (25°C) Density	g/cm ³	1.73-1.74	1.75-1.78	1.76-1.78

3、产品用途 Application

在医药领域中，全氟辛烷可与其它氟碳化合物配伍用做人工血液和离体后器官保存液；在各类电器设备中，全氟辛烷可用作冷却介质和绝缘流体。此外，全氟辛烷还可用作精密机械装置的液压传动液和润滑剂、清洗剂、热传递介质、仪表密封隔离液、化学反应的介质或溶剂等。

In the field of medicine, perfluorooctane can be used as artificial blood and preserving fluid of organ in combination with other fluorocarbons. Perfluorooctane can be used as cooling medium and insulating fluid in various electrical equipments. In addition, perfluorooctane can also be used as hydraulic transmission fluid and lubricants of precision machinery, cleaning agents, medium of heat transmission, sealing fluid of instrument, chemical reaction media or solvents.

4、包装、贮藏 Packaging and storage

全氟辛烷包装规格如下：25g、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。全氟辛烷储存于阴凉、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 perfluorooctane include plastic bottle of 500g, plastic cask of 5kg, steel-plastic cask of 25, 50kg. Specific packaging specifications can be customized according to user requirements. Perfluorooctane is stored in a shady and ventilated storeroom away from fire and heat source. It should be separately stored with edible chemicals and alkali metal.