

# 碳酰氟 Carbonyl Fluoride

## 1、产品介绍 Product introduction

碳酰氟 (CF<sub>2</sub>O)，又名氟光气、氟化羰、羰基氟、氟氧化碳、氧氟化碳等，分子量为 66.01，熔点为-114℃，沸点为-84℃。碳酰氟是一种高毒刺激性气体，对皮肤及呼吸道粘膜具有强烈的刺激作用，能溶于水和乙醇，在水中分解放出剧毒的腐蚀性气体，具有强烈的腐蚀性。作为新一代电子工业中的刻蚀气体和清洗气体，其温室效应极低，具有极低的全球变暖潜能值和极低的大气寿命 (< 1 年)，绿色环保。

Molecular weight of carbonyl fluoride(CF<sub>2</sub>O) is 66.01 and its melting point is -114 °C, boiling point is -84 °C. Carbonyl fluoride is a kind of highly toxic and irritating gas with highly corrosive which has a strong stimulating effect on skin and respiratory tract mucosa, it can dissolve in water and ethanol, decompose in water and release highly toxic corrosive gas. As the etching gas and cleaning gas in the new generation of electronic industry, carbonyl fluoride has very low greenhouse effect, it is environmental friendly with very low global warming potential and very low atmospheric life (< 1 year).

## 2、产品指标 Quality specification

项目 Items	单位 Units	指标 Index
碳酰氟 Carbonyl fluoride (CF <sub>2</sub> O) ≥	Vol.%	99
氧气、氩气 Oxygen, Argon (O <sub>2</sub> +Ar) ≤	Vol.ppm	100
氮气 Nitrogen (N <sub>2</sub> ) ≤	Vol.ppm	1000
四氟化碳 Carbon tetrafluoride (CF <sub>4</sub> ) ≤	Vol.ppm	150
二氧化碳 Carbon dioxide (CO <sub>2</sub> ) ≤	Vol.ppm	2500

### **3、产品用途 Application**

碳酰氟在电子工业中用作清洗气和刻蚀气，其温室效应极低，绿色环保。碳酰氟也可作为有机合成、无机合成中的重要氟化剂、氟原料。碳酰氟还是有机合成中的重要中间体，用于生产氟塑料或其他下游产品。碳酰氟还可以纯化和干燥化合物（尤其是含氟化合物）。

Carbonyl fluoride is used as cleaning gas and etching gas in electronic industry, it is environmental friendly with very low greenhouse effect. Carbonyl fluoride can also be used as an important fluoridizer and fluorine raw material in organic synthesis and inorganic synthesis. Carbonyl fluoride is also an important intermediate in organic synthesis, it is used to produce fluorine plastics or other down-stream product. Carbonyl fluoride can also purify and dry compounds (especially fluorochemicals).

### **4、包装、贮藏 Packaging and storage**

碳酰氟充装在钢质无缝钢瓶中，钢瓶容积为 10 L、40 L，具体包装规格可根据用户需求定制更改。产品储存于阴凉、干燥、通风良好的库房，远离火种、热源。防止受潮、雨淋、阳光直射。

Carbonyl fluoride is stored in standard seamless cylinders, the packing specifications include 10 L and 40 L. Specific packaging specifications can be customized according to user requirements. The product is stored in a shady, dry and ventilated storeroom away from fire and heat source. Protecting against moisture, rain and direct sunlight.