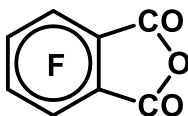


Tetrafluorophthalic anhydride



Purity 97%

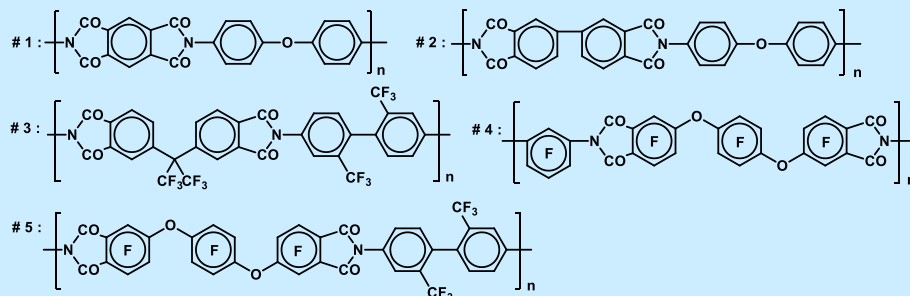
CAS Number 652-12-0

Molecular Formula C8F4O3

Molecular Weight 220.08

It is planned to use 25-40GHz high frequency band for the 5th generation mobile communications. Currently, liquid crystal polymers are considered promising due to their low dielectric constant (Dk; 2.8 to 3.2) and low dielectric loss (Df; <10⁻²). On the other hand, PIs is also an attractive material due to its heat resistance, mechanical strength, and insulation properties, but conventional PIs have unsatisfactory dielectric properties at either 30%RH or 50%RH. It was known that partially fluorinated PIs can improve this point, but fully fluorinated PIs can further improve the dielectric constant and dielectric loss at high frequencies (10 GHz) even when moisture is absorbed.

Application



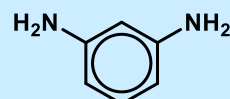
Humidity	Dielectric parameters	#1	#2	#3	#4	#5
30%RH	Dk	3.45	3.30	2.73	2.73	2.68
	Df	0.0089	0.0049	0.0048	0.0039	0.0036
50%RH	Dk	3.52	3.32	2.76	2.76	2.68
	Df	0.014	0.007	0.006	0.006	0.005

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We can supply the following fully fluorinated aromatic diol and diamine.



CAS RN 771-63-1



CAS RN 1198-63-6

Properties:

Appearance

-

Melting point, °C

94-96