

Revision 15. Nov. 2024

[Classification by use]

2-2.Functional polymer-related raw materials, Lithography-related raw materials

No.	Chemical formula (Classification)	Name	CAS No.	Remarks
1	F F F F F F F F F F F F F F F F F F F	Perfluoro(2,2- dimethyl-1,3-dioxole)	37697-64-6	A key monomer for high heat resistant transparent fluoropolymer, high DUV resistant and transparent photomask protection coating polymer.
2	F = F = F = F $F = F = F$ $F = F = F$ $F =$	1H,1H,8H,8H-Pefluoro octane-1,8-diol	90177-96-1	Polyurethane paint raw fluorinated diol for preventing the adhesion of marine organisms.
3	$F \rightarrow \downarrow \downarrow \downarrow \downarrow F$ $F \rightarrow \downarrow \downarrow \downarrow \downarrow F$ $F \rightarrow OH$ $HOC_{6}F_{4}OH$ (Benzene derivative)	Tetrafluorobenzene- 1,4-diol	771-63-1	A raw material for fully fluorinated polyimide with material with high transparency and low birefringence.
4	$F \rightarrow F = F$ $H_{2C} \rightarrow F = F$ $F = C_{6}F_{5}CH = CH_{2}$ (Benzene derivative)	2,3,4,5,6-Pentafluoro styrene	653-34-9	Pentafluorostyrene block copolymer is better than PTFE at good water repellency and solvent repellency. This property is also recognized in another comonomer.
5	$F \xrightarrow{F}_{F} O \xrightarrow{O}_{F} F$ $F \xrightarrow{F}_{F} O \xrightarrow{F}_{F} F$ $(C_2F_5CO)_2O$ (Carboxylic acid and derivative)	Pentafluoropropionic anhydride	356-42-3	Negative photoresist raw material with small line edge roughness.
6	$F - S = 0 - CH_3$ $F - S = 0 - CH_3$ $F - SO_2CF_2COOCH_3$ (Sulfur compound)	Methyl 2,2-difluoro-2- (fluorosulfonyl)acetate	680-15-9	Copolymerizable photoacid(sulfonic acid) generating monomer raw material applied in photoresist with less EUV equipments contamination.



P&M-Invest Ltd. Contact to: http://www.fluorine1.ru Tel: +7 (499)135-64-94, Fax: +7 (499)135-65 -09 E-mail: igumnov@fluorine1.ru

7	$F \rightarrow F = F$ $F \rightarrow F$ $F \rightarrow F$ $C_{6}F_{5}-SO_{2}CI$ (Sulfur compound)	Pentafluorobenzene sulfonyl chloride	832-53-1	Nonionic photoacid-generating monomer source. Photocationic curing paint catalyst.
8	$F \rightarrow F \rightarrow OH$ F F F HC ₆ F ₄ OH (Benzene derivative)	2,3,5,6- Tetrafluorophenol	769-39-1	In order to improve the sensitivity and resolution of photoresists, attempts have been made to increase the resolution by introducing monomeric photoacid generators into the resist.
9	HO $+O$ F + + + + + + + + + + + + + + + + + + +	4-Hydroxy-2,3,5,6- tetrafluorobenzoic acid (abb;HF4BA)	652-34-6	 Preparation of aromatic AB2 type monomers for optical waveguides. Investigation of microbial defluorination and hydroxylation of polyfluorophenols.
10	C8F4O3 (Benzene derivative)	Tetrafluorophthalic anhydride	652-12-0	It was found that partially fluorinated PIs further improved the dielectric constant and dielectric loss at high frequencies (10 GHz) even under high humidity conditions.

* Please contact us for product details.