

2,3,5,6-Tetrafluorophenol

(2,3,5,6-テトラフルオロフェノール)

HC₆F₄OH

| Purity | 98% |
|-------------------|----------|
| CAS Number | 769-39-1 |
| Molecular Formula | C6H2F4O |
| Molecular Weight | 166.07 |

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. We report on the synthesis method of monomers containing fluorinated aromatic sulfone groups and fluoroalkylsulfone groups from common raw materials, and the PEB development results of their terpolymers with hydroxystyrene (HS) and ethyl adamantyl methacrylate (EA). Although the acid generation rate of resists with photoacid-generating groups introduced into the polymer is lower than that of low-molecular-weight sulfonic acid PAGs blend resists, the resolution is good. The photoacid generation rates of the fluorinated aromatic sulfonic acid monomer (F4-MBS) and fluorinated alkyl sulfonic acid monomer (MTFBS) terpolymers were good, indicating the effect of the electron-withdrawing group of fluorine.

Application

| (1) $H \longrightarrow F \to G^{(a)} \to G^{(b)} \to G^{(b)} \to G^{(c)} \to G^$ |
|--|
| (2) Br F (e) (e) (e) (e) (f) (f) (f) (f) (g) $(F4-MBS)$ |
| $ \xrightarrow{HO} \xrightarrow{CF_2SO_3SPh_3} \xrightarrow{(h)} \xrightarrow{O} \xrightarrow{O} \xrightarrow{O} \xrightarrow{CF_2SO_3SPh_3} (MTFBS) $ |
| $(3) \left\{ HS\right\}_{x} \left\{ EA\right\}_{y} \left\{ \downarrow $ |
| (a) SO3+H2SO4+NaCl, (b) CH2=C(CH3)COOH+(CF3CO)2O+CF3COOH, (c) CISPh3, H2O, RT, (d) CH3COONa+CH3COOH, (e) K2CO3+H2O +MeOH, (f) SO2+LiOH+H2O, (g) CISPh3, (h) CH2=C(CH3)COCI |
| J. Fluorine Chem. 129, 2008, p607-612, Macromolecular Rapid Communication, 2006, 27, p1590-1595, (a) Tetrahedron Letter, 40, 1999, p1471- |

| Properties: | |
|-------------------|----------------|
| Appearance | Solid |
| Boiling point, °C | 141-142 |
| Melting point,°C | 28-30 |
| Capacity: | 200kg/Month |
| Packing: | HDPE Jerry can |