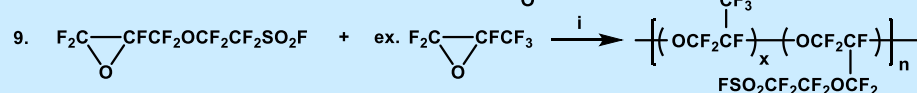
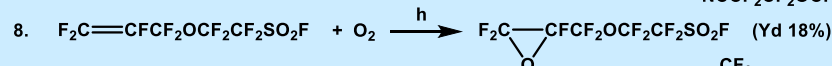
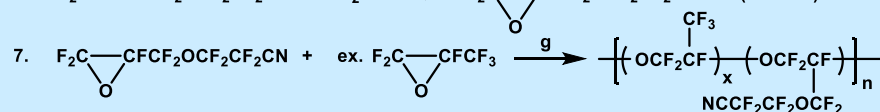
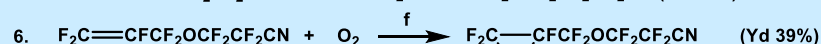


Pentafluoroallyl fluorosulfate (abb. FAFS)



Purity	97%
CAS Number	67641-28-5
Molecular Formula	C3F6O3S
Molecular Weight	230.09

FAFS shows an activated nucleophilic reaction and is widely used for synthesizing pentafluoroallyl compounds with functional perfluoroether groups, halogen groups, and azide groups. In addition, this pentafluoroallyl group is converted to a pentafluoropropyl epoxide group by an oxidation reaction, enabling copolymerization with HFPO.



Application

Notes;

a. CH₃CN, NaN₃, 20degC*3hr

b. CH₃CN + DMF, KI, 0-4degC*3hr

c. KF, DG, -10~5degC*4.5hr + 25degC*1hr

d. KF, DG, 5-10degC*1hr + 25degC*2hr

e. KF, DG, 20-30degC*15min + 2hr,

f. 100ml SUS-tube, 140degC*5,5hr

g. CsF, TG, -33~-35degC*48hr, (x=68, MW=43,100)

h. 100ml SUS-tube, 50ml CFC-113, O₂ 21atm, 80degC*13hr

i. CsF, TG, HFPO-tetramer, -32~-35degC*52.5hr (x=48, MW=42,200)

Molecules 2011, 16, p6512-6540, US 4,273,728, US 4,384,128

Chem. for Sustainable Developmnt. 15, 2007, p11-23,

Perfluoroallyl fluorosulfate oxide ; We are also working on oxidation reaction

products of FAFS; $\text{F}_2\text{C}-\text{C}(\text{OCF}_2\text{CF}_2\text{OSO}_2\text{F})-\text{O}$ (CAS 124693-95-7).

Properties:

Appearance	Liquid
Boiling point, °C	62-64