

2,2,3,3-Tetrafluoro-3-(1,2,2-trifluoroethenyloxy)-propan-1-ol

2, 2, 3, 3-テトラフルオロ-3-(パーフルオロビニロキシ)プロパン-1-オール(略号 ; FVE-C3OH)



Purity	97%
CAS Number	136403-80-0
Molecular Formula	C5H3F7O2
Molecular Weight	228.06
Application	<p>1. アニオン付加重合での直鎖フッ素化オリゴエーテルの合成原料。指紋防汚剤としての応用を期待。 $\text{CF}_3\text{CH}_2\text{OH} + \text{CF}_2=\text{CFO}(\text{CF}_2)_3\text{OH} + \text{k}_2\text{CO}_3/75\sim 120^\circ\text{C} * 2\text{hr}/\text{クロマト精製} \rightarrow \text{CF}_3\text{CH}_2\text{O}(\text{CF}_2\text{CFHO}(\text{CF}_2)_3\text{CH}_2\text{O})_8\text{H}$ Yd=40wt% (1) (1) + $\text{C}_3\text{F}_7\text{OCF}(\text{CF}_3)\text{COF} \rightarrow \text{CF}_3\text{CH}_2\text{O}(\text{CF}_2\text{CFHO}(\text{CF}_2)_3\text{CH}_2\text{O})_8\text{COCF}(\text{CF}_3)\text{OC}_3\text{F}_7$ (2) (2) + 20%F₂ $\rightarrow \text{CF}_3\text{CF}_2\text{O}(\text{CF}_2\text{CF}_2\text{O}(\text{CF}_2)_4)_8\text{COCF}(\text{CF}_3)\text{OC}_3\text{F}_7$ (3) (3) + CH₃OH $\rightarrow \text{CF}_3\text{CF}_2\text{O}(\text{CF}_2\text{CF}_2\text{O}(\text{CF}_2)_4)_7(\text{CF}_2)_3\text{COOCH}_3$ (4) (4) + NaBH₄/LiCl(cat.) $\rightarrow \text{CF}_3\text{CF}_2\text{O}(\text{CF}_2\text{CF}_2\text{O}(\text{CF}_2)_4)_7(\text{CF}_2)_3\text{COH}_2\text{OH}$ (5) (5) + CH₂=CHCH₂Br + NaOH $\rightarrow \text{CF}_3\text{CF}_2\text{O}(\text{CF}_2\text{CF}_2\text{O}(\text{CF}_2)_4)_7(\text{CF}_2)_3\text{COH}_2\text{OCH}_2\text{CH}=\text{CH}_2$ (6) (6) + HsiCl₃ + peroxide $\rightarrow \text{HC}(\text{OCH}_3)_3/\text{CH}_3\text{OH} \rightarrow \text{CF}_3\text{CF}_2\text{O}(\text{CF}_2\text{CF}_2\text{O}(\text{CF}_2)_4)_7(\text{CF}_2)_3\text{COH}_2\text{OCH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{Si}(\text{OCH}_3)_3$ (7) <i>参考例 US 9,540,404, US 5,134,211</i></p> <p>2. 水酸基を有するビニルモノマーと VDF/CTFE のラジカル懸濁共重合参考例。生成した OH 基を有する共重合体を OCN(CH₂)₆NCO で硬化させた塗膜は鉛筆硬度 2H、Weather-O-Meter 4,000hr 後の耐候性でも塗膜の変化を認めなかった。比較のメタクリル樹脂より良好。 <i>参考例 US 4,564,717</i></p>
Properties:	
Appearance	-
Boiling point, °C	124-125
Flash point, °C	
Capacity:	-
Packing:	-
UN, PG:	-