



>>Entry Name: 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-Heptadecafluoro-1-octanesulfonic acid, 9Cl

Synonym(s): Perfluorooctanesulfonic acid. POSA

CAS Registry Number: 1763-23-1

Related CAS Registry Numbers(s): 29457-72-5

$\text{F}_3\text{C}(\text{CF}_2)_7\text{SO}_3\text{H}$

Molecular Formula: $\text{C}_8\text{HF}_{17}\text{O}_3\text{S}$

Molecular Weight: 500.133

Accurate Mass: 499.937491

Percentage Composition: C 19.21%; H 0.20%; F 64.58%; O 9.60%; S 6.41%

Use/Importance: Superacidic catalyst

Physical Description: Waxy solid

Melting Point: Mp 90°

Boiling Point: Bp 258-260°. Bp₁₀ 145°

Other Data: Readily forms salts

Fluka: 77283

>>Derivative: Na salt

CAS Registry Number: 4021-47-0

Melting Point: Mp 331-332°

>>Derivative: K salt

CAS Registry Number: 2795-39-3

Physical Description: Cryst. (EtOH)

Melting Point: Mp 285° (277-280°)

>>Derivative: Tetraethylammonium salt

Melting Point: Mp 184-190°

>>Derivative: Fluoride

CAS Registry Number: 307-35-7

Molecular Formula: $\text{C}_8\text{F}_{18}\text{O}_2\text{S}$

Molecular Weight: 502.124

Accurate Mass: 501.933154

Percentage Composition: C 19.14%; F 68.10%; O 6.37%; S 6.39%

Boiling Point: Bp 154-155°

Aldrich: 31972-4

Fluka: 77294

>>Derivative: Chloride

CAS Registry Number: 423-60-9

Molecular Formula: $\text{C}_8\text{ClF}_{17}\text{O}_2\text{S}$

Molecular Weight: 518.578

Accurate Mass: 517.903603

Percentage Composition: C 18.53%; Cl 6.84%; F 62.28%; O 6.17%; S 6.18%

Melting Point: Mp 37°

Boiling Point: Bp 194-195°. Bp₂₀ 98°

>>Derivative: Amide

Synonym(s): Perfluorooctanesulfonamide

CAS Registry Number: 754-91-6

Molecular Formula: $\text{C}_8\text{H}_2\text{F}_{17}\text{NO}_2\text{S}$

Molecular Weight: 499.148

Accurate Mass: 498.953475

Percentage Composition: C 19.25%; H 0.40%; F 64.70%; N 2.81%; O 6.41%; S 6.42%

Use/Importance: Major metabolite of Sulfluramid

Physical Description: Cryst. (CHCl_3)

Melting Point: Mp 152°