>>**Entry Name: Triphenylsulfonium(1+)**

Related CAS Registry Numbers(s): 437-13-8 57835-99-1 57900-42-2
$[Ph_3S]^{(+)}$

Molecular Formula: $C_{18}H_{15}S^{(+)}$
Molecular Weight: 263.382
Accurate Mass: 263.089445
Percentage Composition: C 82.09%; H 5.74%; S 12.17%

>>**Derivative:** Chloride

CAS Registry Number: 4270-70-6
Molecular Formula: $C_{18}H_{15}ClS$
Molecular Weight: 298.835
Accurate Mass: 298.058297
Percentage Composition: C 72.35%; H 5.06%; Cl 11.86%; S 10.73%
Physical Description: Cryst.
Melting Point: Mp 297-298°
Other Data: Hygroscopic
Fluka: 93135
Rare Chemicals Library: S45545-8

>>**Derivative:** Bromide

CAS Registry Number: 3353-89-7

Molecular Formula: $C_{18}H_{15}BrS$
Molecular Weight: 343.286
Accurate Mass: 342.027781
Percentage Composition: C 62.98%; H 4.40%; Br 23.28%; S 9.34%
Use/Importance: Used as a 5% aq. soln. for detn. of Bi, Co
Physical Description: Cryst. ($Me_2CO/CHCl_3$)
Melting Point: Mp 292.5° (285-287°)
Solubility: Sol. H_2O

>>**Derivative:** Iodide

CAS Registry Number: 3744-08-9
Molecular Formula: $C_{18}H_{15}IS$
Molecular Weight: 390.287
Accurate Mass: 389.993918
Percentage Composition: C 55.39%; H 3.87%; I 32.52%; S 8.22%
Physical Description: Solid
Melting Point: Mp 248-250°

>>**Derivative:** Hexafluoroantimonate

CAS Registry Number: 57840-38-7
Molecular Formula: $C_{18}H_{15}F_6SSb$
Molecular Weight: 499.123
Accurate Mass: 497.983684
Percentage Composition: C 43.32%; H 3.03%; F 22.84%; S 6.42%; Sb 24.39%
Physical Description: Cryst. (EtOH/2-propanol)
Melting Point: Mp 177-178°

>>**Derivative:** Trifluoromethanesulfonate

CAS Registry Number: 13891-29-7
Extra CAS Registry Numbers(s): 66003-78-9
Molecular Formula: $C_{19}H_{15}F_3O_3S_2$
Molecular Weight: 412.453
Accurate Mass: 412.041469
Percentage Composition: C 55.33%; H 3.67%; F 13.82%; O 11.64%; S 15.55%
Physical Description: Cryst.
Melting Point: Mp 135-137°