



>>Entry Name: Tributyl(hexadecyl)phosphonium(1+), 9Cl

CAS Registry Number: 66997-36-2

Related CAS Registry Numbers(s): 112011-36-6

$(\text{H}_3\text{CCH}_2\text{CH}_2\text{CH}_2)_3\text{P}^{(+)}(\text{CH}_2)_{15}\text{CH}_3$

Molecular Formula: $\text{C}_{28}\text{H}_{60}\text{P}^{(+)}$

Molecular Weight: 427.756

Accurate Mass: 427.443262

Percentage Composition: C 78.62%; H 14.14%; P 7.24%

Use/Importance: Used as 1% soln. in aq. MeOH for extraction-photometric detn. of Bi (forms ion-associate with $\text{BiI}_4^{(-)}$, 20% benzophenone in Me_2CO)

Other Data: Salts can behave as phase transfer agents

>>Derivative: Chloride

CAS Registry Number: 41272-12-2

Molecular Formula: $\text{C}_{28}\text{H}_{60}\text{ClP}$

Molecular Weight: 463.208

Accurate Mass: 462.412114

Percentage Composition: C 72.60%; H 13.06%; Cl 7.65%; P 6.69%

Physical Description: No phys. props. reported

>>Derivative: Bromide

CAS Registry Number: 14937-45-2

Molecular Formula: $\text{C}_{28}\text{H}_{60}\text{BrP}$

Molecular Weight: 507.66

Accurate Mass: 506.381598

Percentage Composition: C 66.25%; H 11.91%; Br 15.74%; P 6.10%

Physical Description: Cryst. (hexane)

Melting Point: Mp 54°

Aldrich: 27620-0

Fluka: 52353

Sigma: H0389

>>Derivative: Iodide

CAS Registry Number: 56772-64-6

Molecular Formula: $\text{C}_{28}\text{H}_{60}\text{IP}$

Molecular Weight: 554.66

Accurate Mass: 554.347735

Percentage Composition: C 60.63%; H 10.90%; I 22.88%; P 5.58%

Physical Description: Cryst. (hexane)

Melting Point: Mp 57-58°

>>Derivative: Azide

CAS Registry Number: 66997-37-3

Molecular Formula: $\text{C}_{28}\text{H}_{60}\text{N}_3\text{P}$

Molecular Weight: 469.776

Accurate Mass: 469.452484

Percentage Composition: C 71.59%; H 12.87%; N 8.94%; P 6.59%

Physical Description: Solid

Melting Point: Mp 45-46°

>>Derivative: Methanesulfonate

CAS Registry Number: 86471-19-4

Molecular Formula: $\text{C}_{29}\text{H}_{63}\text{O}_3\text{PS}$

Molecular Weight: 522.855

Accurate Mass: 522.423552

Percentage Composition: C 66.62%; H 12.14%; O 9.18%; P 5.92%; S 6.13%

Physical Description: Waxy paste