



>>Entry Name: Tribenzylphosphine, 8Cl

Synonym(s): Tris(phenylmethyl)phosphine, 9Cl

CAS Registry Number: 7650-89-7

$\text{P}(\text{CH}_2\text{Ph})_3$

Molecular Formula: $\text{C}_{21}\text{H}_{21}\text{P}$

Molecular Weight: 304.371

Accurate Mass: 304.138087

Percentage Composition: C 82.87%; H 6.95%; P 10.18%

Physical Description: Air-sensitive cryst.

Melting Point: Mp 92-95°

Boiling Point: $\text{Bp}_{0.2}$ 183-185°

Aldrich: 33694-7

Fluka: 90680

>>Derivative: Methiodide

Synonym(s): Tribenzylmethylphosphonium iodide. Methyltris(phenylmethyl)phosphonium iodide

CAS Registry Number: 40985-25-9

Molecular Formula: $\text{C}_{22}\text{H}_{24}\text{IP}$

Molecular Weight: 446.31

Accurate Mass: 446.066035

Percentage Composition: C 59.21%; H 5.42%; I 28.43%; P 6.94%

Physical Description: Cryst. (EtOH)

Melting Point: Mp 170-171°. Mp 183-184°

>>Derivative: Benzyl chloride

Synonym(s): Tetrabenzylphosphonium chloride. Tetrakis(phenylmethyl)phosphonium chloride

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

Molecular Weight: 430.956

Accurate Mass: 430.161714

Percentage Composition: C 78.04%; H 6.55%; Cl 8.23%; P 7.19%

Melting Point: Mp 225°

>>Derivative: Oxide

CAS Registry Number: 4538-55-0

Molecular Formula: $\text{C}_{21}\text{H}_{21}\text{OP}$

Molecular Weight: 320.37

Accurate Mass: 320.133002

Percentage Composition: C 78.73%; H 6.61%; O 4.99%; P 9.67%

Use/Importance: Ligand for Zn, Co, Ni, Zr

Physical Description: Cryst. (EtOH, Et₂O/petrol or Me₂CO)

Melting Point: Mp 210-212°

Other Data: Forms 2:1 complexes with HCl, HI, HNO₃, HClO₄

Hazard & Toxicity: LD₅₀ (mus, orl) >2000 mg/kg

Rare Chemicals Library: S53640-7

>>Derivative: Sulfide

CAS Registry Number: 21187-15-5

Molecular Formula: $\text{C}_{21}\text{H}_{21}\text{PS}$

Molecular Weight: 336.437

Accurate Mass: 336.110157

Percentage Composition: C 74.97%; H 6.29%; P 9.21%; S 9.53%

Physical Description: Cryst. (toluene)

Melting Point: Mp 265-267°. Mp 282-283.5°

References: