



>>Entry Name: Triphenylstibine oxide, 9Cl, 8Cl

CAS Registry Number: 4756-75-6

$\text{Ph}_3\text{Sb}=\text{O}$

Molecular Formula: $\text{C}_{18}\text{H}_{15}\text{OSb}$

Molecular Weight: 369.066

Accurate Mass: 368.016111

Percentage Composition: C 58.58%; H 4.10%; O 4.34%; Sb 32.99%

Use/Importance: Catalyses direct reaction between CO_2 and amino alcohols, diamines or secondary amines to give 2-oxazolidinones, 2-imidazolones or ureas; catalyses aminolysis of *N*-protected amino acids, leading to peptides; catalyst for oxirane polym; catalyses amine + acid $\rightarrow$ amide; catalyst for aminolysis of RCOSH with RNH_2 or $\text{R}_2\text{NH} \rightarrow \text{RCONHR}$ etc.; oxidises thiols

>>Derivative: Dimer

>>Derivative: Polymer

Source/Synthesis: Synth. from $\text{Ph}_3\text{Sb} + \text{H}_2\text{O}_2$ in Me_2CO , or by heating $\text{Ph}_3\text{Sb}(\text{OH})_2$

Physical Description: Solid

Melting Point: Mp 258-260°. Mp 280°. Mp 290°

References:

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