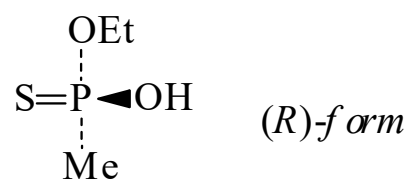




>>Entry Name: *O*-Ethyl methylphosphonothioate, 9CI

ENTRY UNDER REVIEW

Synonym(s): *O*-Ethyl hydrogen methylphosphonothioate



CAS Registry Number: 18005-40-8

Related CAS Registry Numbers(s): 2511-10-6 13088-84-1

Molecular Formula: C₃H₉O₂PS

Molecular Weight: 140.143

Accurate Mass: 140.006087

Percentage Composition: C 25.71%; H 6.47%; O 22.83%; P 22.10%; S 22.88%

Aldrich: 44503-7

>>Variant: (*R*)-form

CAS Registry Number: 38315-72-9

Molecular Formula: C₃H₉O₂PS

Molecular Weight: 140.143

Accurate Mass: 140.006087

Percentage Composition: C 25.71%; H 6.47%; O 22.83%; P 22.10%; S 22.88%

Physical Description: Liq.

Optical Rotation: $[\alpha]_{\text{D}} +10.35$ (neat)

>>Derivative: (*R*)-1-Phenylethylammonium salt

CAS Registry Number: 53518-61-9

Physical Description: Solid

Melting Point: Mp 139-140°

Optical Rotation: $[\alpha]_{\text{D}}^{25} +10.64$ (c, 3.1 in MeOH)

>>Derivative: (*S*)-1-Phenylethylammonium salt

Physical Description: Solid

Melting Point: Mp 107.5-109°

Optical Rotation: $[\alpha]_{\text{D}}^{20} +5.33$

>>Derivative: Dicyclohexylammonium salt

Physical Description: Cryst. (EtOAc)

Melting Point: Mp 127°

Optical Rotation: $[\alpha]_{\text{D}}^{25} +8.47$ (c, 5.0 in MeOH)

>>Variant: (*S*)-form

CAS Registry Number: 38315-77-4

Molecular Formula: C₃H₉O₂PS

Molecular Weight: 140.143

Accurate Mass: 140.006087

Percentage Composition: C 25.71%; H 6.47%; O 22.83%; P 22.10%; S 22.88%

Physical Description: Liq.

Optical Rotation: $[\alpha]_{\text{D}} -10.5$ (neat)

>>Derivative: (*R*)-1-Phenylethylammonium salt

Melting Point: Mp 108-110°

Optical Rotation: $[\alpha]_{\text{D}}^{20} -5$

>>Derivative: (*S*)-1-Phenylethylammonium salt

CAS Registry Number: 53518-62-0

Melting Point: Mp 139-140°

Optical Rotation: $[\alpha]$