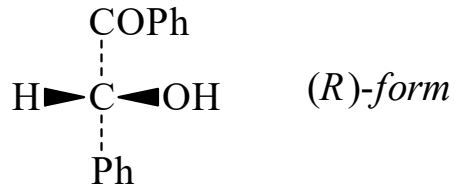
>>**Entry Name: Benzoin,** 8CI
ENTRY UNDER REVIEW
Synonym(s): 2-Hydroxy-1,2-diphenylethanone, 9CI. α-Hydroxybenzyl phenyl ketone. Benzoylphenylcarbinol. 2-Hydroxy-2-phenylacetophenone. FEMA 2132



(*R*)-*form*

CAS Registry Number: 119-53-9
Related CAS Registry Numbers(s): 441-38-3 574-06-1 579-44-2 1459-20-7 8050-35-9 57794-28-2

Molecular Formula: $C_{14}H_{12}O_2$
Molecular Weight: 212.248
Accurate Mass: 212.08373
Percentage Composition: C 79.23%; H 5.70%; O 15.08%
General Statement: For enol form see 1,2-Diphenyl-1,2-ethenediol DZP29-J
Hazard & Toxicity: LD_{50} (rat, orl) 10,000 mg/kg

Aldrich: 39941-8
Fluka: 12510

>>**Variant:** (*R*)-form

CAS Registry Number: 5928-66-5
Molecular Formula: $C_{14}H_{12}O_2$
Molecular Weight: 212.248
Accurate Mass: 212.08373
Percentage Composition: C 79.23%; H 5.70%; O 15.08%
Physical Description: Needles
Melting Point: Mp 131-132.5°
Optical Rotation: $[\alpha]_D^{12}$–117.5 (Me_2CO)
Aldrich: 45994-1

>>**Derivative:** Ac

CAS Registry Number: 84275-45-6
Molecular Formula: $C_{16}H_{14}O_3$
Molecular Weight: 254.285
Accurate Mass: 254.094295
Percentage Composition: C 75.58%; H 5.55%; O 18.88%
Physical Description: Needles
Optical Rotation: $[\alpha]_D^{14}$–217.7 ($CHCl_3$)

>>**Derivative:** Me ether
Synonym(s): 2-Methoxy-1,2-diphenylethanone

CAS Registry Number: 82572-28-9
Molecular Formula: $C_{15}H_{14}O_2$
Molecular Weight: 226.274
Accurate Mass: 226.09938
Percentage Composition: C 79.62%; H 6.24%; O 14.14%
Melting Point: Mp 53-54°
Optical Rotation: $[\alpha]_D^{12}$–88.2 ($CHCl_3$). $[\alpha]_D^{11}$–94.3 (EtOH)

>>**Variant:** (*S*)-form

CAS Registry Number: 5928-67-6
Molecular Formula: $C_{14}H_{12}O_2$
Molecular Weight: 212.248
Accurate Mass: 212.08373
Percentage Composition: C 79.23%; H 5.70%; O 15.08%
Physical Description: Needles
Melting Point: Mp 131-132.5°
Optical Rotation: $[\alpha]_D^{25}$+118.4 (Me_2CO)
Aldrich: 25625-0