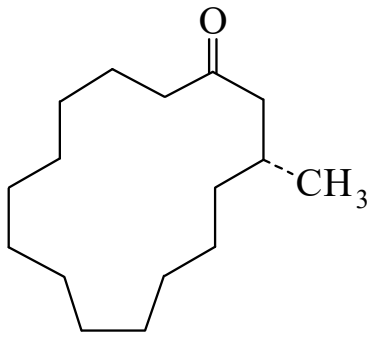
>>**Entry Name: 3-Methylcyclopentadecanone**
ENTRY UNDER REVIEW
Synonym(s): Muscone. FEMA 3434



(*R*)-*form*

CAS Registry Number: 541-91-3

Molecular Formula: $C_{16}H_{30}O$
Molecular Weight: 238.412
Accurate Mass: 238.229665
Percentage Composition: C 80.61%; H 12.68%; O 6.71%
Hazard & Toxicity: Skin irritant

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

CAS Registry Number: 10403-00-6

Molecular Formula: $C_{16}H_{30}O$
Molecular Weight: 238.412
Accurate Mass: 238.229665
Percentage Composition: C 80.61%; H 12.68%; O 6.71%
Biological Source: Contained in natural musk
Boiling Point: $Bp_{0.5}$ 130°
Optical Rotation: $[\alpha]_D^{17}$ –13.9
Density: d_4^{17} 0.922
Refractive Index: n_D^{17} 1.4802

>>**Derivative:** Semicarbazone

Melting Point: Mp 134°

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

CAS Registry Number: 63975-98-4
Molecular Formula: $C_{16}H_{30}O$
Molecular Weight: 238.412
Accurate Mass: 238.229665
Percentage Composition: C 80.61%; H 12.68%; O 6.71%
Optical Rotation: $[\alpha]_D$ +13.83

>>**Derivative:** Semicarbazone

Melting Point: Mp 132.2-132.8°

>>**Variant:** (±)-form

CAS Registry Number: 956-82-1
Molecular Formula: $C_{16}H_{30}O$
Molecular Weight: 238.412
Accurate Mass: 238.229665
Percentage Composition: C 80.61%; H 12.68%; O 6.71%
Use/Importance: Important perfume ingredient
Boiling Point: $Bp_{0.8}$ 132-134°

>>**Derivative:** Semicarbazone

Melting Point: Mp 134.5°

References: