



>>Entry Name: 5,5-Dimethyl-2,4-hexanedione, 9CI

Synonym(s): Pivalylacetone. Acetylpinacolin

CAS Registry Number: 7307-04-2

Type of Compound Code(s): PS8300 PS7700 PA1450 PM6450

$(\text{H}_3\text{C})_3\text{CCOCH}_2\text{COCH}_3$

Molecular Formula: $\text{C}_8\text{H}_{14}\text{O}_2$

Molecular Weight: 142.197

Accurate Mass: 142.09938

Percentage Composition: C 67.57%; H 9.92%; O 22.50%

Use/Importance: Used as a 0.1M soln. in C_6H_6 for extraction-photometric detn. of Cu; extraction separation of transition metals

Physical Description: Fragrant oil

Boiling Point: Bp_{745} 170-171°

Solubility: Sol. common org. solvs.

>>Derivative: Cu complex

Physical Description: Purple prisms

Melting Point: Mp 196-197° (190°)

References:

Morgan, G.T. *et al.*, *J.C.S.*, 1922, **121**, 922, (*synth*)

Koshimura, H. *et al.*, *Anal. Chim. Acta*, 1970, **49**, 67, (*use*)

Koshimura, H. *et al.*, *Bunseki Kagaku (Jpn. Anal.)*, 1973, **22**, 97, (*detn, Cu*)

Cornforth, J. *et al.*, *Aust. J. Chem.*, 1984, **37**, 1453, (*synth*)