



>>Entry Name: **1,1,1-Trifluoro-2,4-pentanedione**, 9CI

Synonym(s): 1,1,1-Trifluoroacetylacetone

CAS Registry Number: 367-57-7

$\text{H}_3\text{CCOCH}_2\text{COCF}_3$

Molecular Formula: $\text{C}_5\text{H}_5\text{F}_3\text{O}_2$

Molecular Weight: 154.088

Accurate Mass: 154.024164

Percentage Composition: C 38.97%; H 3.27%; F 36.99%; O 20.77%

Use/Importance: Used as a 0.1M soln. in CHCl_3 for extraction-separation of Al, Be, Cu, Fe(III)

Physical Description: Liq.

Boiling Point: Bp 107°

Solubility: Sol. common org. solvs.

Refractive Index: n_D^{25} 1.3864

Aldrich: 23597-0

Fluka: 91674

References:

Aldrich Library of ^{13}C and ^1H FT NMR Spectra, 1992, **1**, 662B, (nmr)

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **1**, 425D, (ir)

Aldrich Library of FT-IR Spectra: Vapor Phase, 1989, **3**, 511C, (ir)

Reid, J.C. *et al.*, *J.A.C.S.*, 1950, **72**, 2948, (synth)

Scribner, W.G. *et al.*, *Anal. Chem.*, 1965, **37**, 1136; 1966, **38**, 1779, (detn, Al, Cu, Fe, Be)