



>>Entry Name: 2,4-Pentadienal, 9CI

ENTRY UNDER REVIEW

Synonym(s): FEMA 3217

CAS Registry Number: 764-40-9

$\text{H}_2\text{C}=\text{CHCH}=\text{CHCHO}$

Molecular Formula: $\text{C}_5\text{H}_6\text{O}$

Molecular Weight: 82.102

Accurate Mass: 82.041865

Percentage Composition: C 73.15%; H 7.37%; O 19.49%

Use/Importance: Flavouring ingredient

>>Variant: (*E*)-form

CAS Registry Number: 20432-40-0

Molecular Formula: $\text{C}_5\text{H}_6\text{O}$

Molecular Weight: 82.102

Accurate Mass: 82.041865

Percentage Composition: C 73.15%; H 7.37%; O 19.49%

Boiling Point: Bp_{10} 30°

Other Data: λ_{max} 250 nm (ϵ 34 400)

>>Derivative: 2,4-Dinitrophenylhydrazone

Melting Point: Mp 176-177°

>>Variant: (*Z*)-form

CAS Registry Number: 37918-47-1

Molecular Formula: $\text{C}_5\text{H}_6\text{O}$

Molecular Weight: 82.102

Accurate Mass: 82.041865

Percentage Composition: C 73.15%; H 7.37%; O 19.49%

Boiling Point: Bp_{10} 29-30°

Other Data: λ_{max} 259.5 nm (ϵ 19 100)

>>Derivative: 2,4-Dinitrophenylhydrazone

Physical Description: Orange-red needles

Melting Point: Mp 150-151°

References:

Woods, G.F. *et al.*, *J.A.C.S.*, 1946, **68**, 2483, (*synth*)

Cookson, R.C. *et al.*, *Chem. Comm.*, 1978, 924, (*synth*)

Fenaroli's Handbook of Flavor Ingredients, 3rd edn., (ed. Burdock, G.A.), CRC Press, 1995, **2**, 637

Encyclopedia of Food and Color Additives, (ed. Burdock, G.A.), CRC Press, 1997, 2114-2115