



>>Entry Name: 2-Tridecenal

ENTRY UNDER REVIEW

Synonym(s): FEMA 3082

CAS Registry Number: 7774-82-5

$\text{H}_3\text{C}(\text{CH}_2)_9\text{CH}=\text{CHCHO}$

Molecular Formula: $\text{C}_{13}\text{H}_{24}\text{O}$

Molecular Weight: 196.332

Accurate Mass: 196.182715

Percentage Composition: C 79.53%; H 12.32%; O 8.15%

Use/Importance: Flavouring ingredient

Aldrich: W30821-8

>>Variant: (E)-form

CAS Registry Number: 7069-41-2

Molecular Formula: $\text{C}_{13}\text{H}_{24}\text{O}$

Molecular Weight: 196.332

Accurate Mass: 196.182715

Percentage Composition: C 79.53%; H 12.32%; O 8.15%

Physical Description: Liq.

Boiling Point: $\text{Bp}_{0.16}$ 80°

>>Derivative: 2,4-Dinitrophenylhydrazone

Physical Description: Cryst.

Melting Point: Mp 117°

>>Variant: (Z)-form

CAS Registry Number: 71277-06-0

Molecular Formula: $\text{C}_{13}\text{H}_{24}\text{O}$

Molecular Weight: 196.332

Accurate Mass: 196.182715

Percentage Composition: C 79.53%; H 12.32%; O 8.15%

Physical Description: Liq.

Boiling Point: $\text{Bp}_{0.3}$ 90-92°

>>Derivative: Di-Et acetal

Synonym(s): 1,1-Diethoxy-2-tridecene

CAS Registry Number: 13043-66-8

Molecular Formula: $\text{C}_{17}\text{H}_{34}\text{O}_2$

Molecular Weight: 270.454

Accurate Mass: 270.25588

Percentage Composition: C 75.50%; H 12.67%; O 11.83%

Boiling Point: $\text{Bp}_{0.2}$ 111°

References:

Hirai, K. *et al.*, *Tet. Lett.*, 1972, 2743, (*synth, pmr*)

Bestmann, H.J. *et al.*, *Chem. Ber.*, 1982, **115**, 161, (*synth*)

Ford, R.A. *et al.*, *Food Chem. Toxicol.*, 1988, **26**, 411, (*rev, tox*)

Chang, Y.-H. *et al.*, *Synthesis*, 1990, 1033, (*synth, pmr, ir, ms*)

Fenaroli's Handbook of Flavor Ingredients, 3rd edn., (ed. Burdock, G.A.), CRC Press, 1995, **2**, 766

Encyclopedia of Food and Color Additives, (ed. Burdock, G.A.), CRC Press, 1997, 2828-2829