



>>Entry Name: 2,6-Nonadienal, 9CI

ENTRY UNDER REVIEW

CAS Registry Number: 26370-28-5

H3CCH2CH=CHCH2CH2CH=CHCHO

Molecular Formula: C₉H₁₄O

Molecular Weight: 138.209

Accurate Mass: 138.104465

Percentage Composition: C 78.21%; H 10.21%; O 11.58%

>>Variant: (2E,6E)-form

Synonym(s): FEMA 3766

CAS Registry Number: 17587-33-6

Molecular Formula: C₉H₁₄O

Molecular Weight: 138.209

Accurate Mass: 138.104465

Percentage Composition: C 78.21%; H 10.21%; O 11.58%

Biological Source: Occurs in beef and mutton tallows and is formed during deep frying of fat. Present in fruits, e.g. mango, and fish

Use/Importance: Flavouring agent.

Aldrich: W37660-4

>>Variant: (2E,6Z)-form

Synonym(s): Violet-leaf aldehyde. Cucumber aldehyde. FEMA 3766

CAS Registry Number: 557-48-2

Molecular Formula: C₉H₁₄O

Molecular Weight: 138.209

Accurate Mass: 138.104465

Percentage Composition: C 78.21%; H 10.21%; O 11.58%

Biological Source: Constit. of violet leaf oil, cherry, melon, peas, cooked potato, wheat bread, other breads, milk, lean and fatty fish, black tea, oyster, clam and other foods and other plant sources

Use/Importance: Used in perfumery

Physical Description: Liq. with cucumber odour

Boiling Point: Bp 187°. Bp₁₁ 94-98°

Hazard & Toxicity: Skin irritant. LD₅₀ (rat, orl) > 5000 mg/kg

Aldrich: 29467-5

References:

Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **1**, 743C, (nmr)

Aldrich Library of FT-IR Spectra: Vapor Phase, 1989, **3**, 565D, (ir)

Ruzicka, L. *et al.*, *Helv. Chim. Acta*, 1942, **25**, 760; 1944, **27**, 1561, (isol, synth)

Seifert, R.M. *et al.*, *J. Agric. Food Chem.*, 1968, **16**, 880, (synth)

Hariel, J., *Soap, Perfum. Cosmet.*, 1969, **42**, 571, (use)

Meyers, A.I. *et al.*, *J.O.C.*, 1973, **38**, 36, (synth)

Kajiwara, T. *et al.*, *Agric. Biol. Chem.*, 1975, **39**, 1617, (synth, ir)

Tadema, G. *et al.*, *Rec. Trav. Chim. (J. R. Neth. Chem. Soc.)*, 1976, **95**, 66, (synth)

Opdyke, D.L.J., *Food Chem. Toxicol.*, 1982, **20**, 769, (rev, tox)

Lewis, R.J., *Food Additives Handbook*, Van Nostrand Reinhold International, New York, 1989, NMV760; NMV775

Shieberle, P. *et al.*, *J. Food Sci.*, 1990, **55**, 193-195, (isol)

Crombie, L. *et al.*, *J.C.S. Perkin 1*, 1991, 567, (synth, ir, pmr, cmr)

Encyclopedia of Food and Color Additives, (ed. Burdock, G.A.), CRC Press, 1997, 1966; 1967, (occur, props)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, NMV760