



>>Entry Name: 9-Decenoic acid

ENTRY UNDER REVIEW

Synonym(s): Caproleic acid. FEMA 3660

CAS Registry Number: 14436-32-9



Molecular Formula: C<sub>10</sub>H<sub>18</sub>O<sub>2</sub>

Molecular Weight: 170.251

Accurate Mass: 170.13068

Percentage Composition: C 70.55%; H 10.66%; O 18.80%

Biological Source: Minor constit. of milk fats. Also detected in beer, wine, clams, Parmesan cheese, snails and human adipose tissue

Use/Importance: Commercially available flavouring agent

Physical Description: Liq. with fatty and beetle-like odour

Boiling Point: Bp<sub>21</sub> 158-163°

Aldrich: W36600-5

>>Derivative: Me ester

Molecular Formula: C<sub>11</sub>H<sub>20</sub>O<sub>2</sub>

Molecular Weight: 184.278

Accurate Mass: 184.14633

Percentage Composition: C 71.70%; H 10.94%; O 17.36%

Physical Description: Oil

Boiling Point: Bp<sub>20</sub> 120°

>>Derivative: 4-Bromophenacyl ester

Molecular Formula: C<sub>18</sub>H<sub>23</sub>BrO<sub>3</sub>

Molecular Weight: 367.282

Percentage Composition: C 58.86%; H 6.31%; Br 21.76%; O 13.07%

Physical Description: Cryst. (EtOH aq.)

Melting Point: Mp 58°

References:

Black, H.K. *et al.*, *J.C.S.*, 1953, 1785, (*synth*)

Renner, E. *et al.*, *Milchwissenschaft*, 1978, **33**, 489, (*isol*)

Hase, T.A. *et al.*, *Synth. Commun.*, 1979, **9**, 63, (*synth*)

Shirakawa, T. *et al.*, *Dev. Food Sci.*, 1988, **18**, 915, (*occur, props*)

Bartra, M. *et al.*, *J.O.C.*, 1991, **56**, 5132, (*synth, pmr, cmr, ir*)