



>>Entry Name: 5,6,7,8-Tetrahydro-1-naphthalenecarboxylic acid, 9Cl

Synonym(s): 5,6,7,8-Tetrahydro-1-naphthoic acid, 8Cl. *ar*-Tetrahydro- $\alpha$ -naphthoic acid. Tetralin-5-carboxylic acid

CAS Registry Number: 4242-18-6

Molecular Formula: C<sub>11</sub>H<sub>12</sub>O<sub>2</sub>

Molecular Weight: 176.215

Accurate Mass: 176.08373

Percentage Composition: C 74.98%; H 6.86%; O 18.16%

Physical Description: Prisms (H<sub>2</sub>O), cryst. (hexane)

Melting Point: Mp 148-150° (128°)

>>Derivative: Et ester

CAS Registry Number: 4242-17-5

Molecular Formula: C<sub>13</sub>H<sub>16</sub>O<sub>2</sub>

Molecular Weight: 204.268

Accurate Mass: 204.11503

Percentage Composition: C 76.44%; H 7.89%; O 15.67%

Boiling Point: Bp<sub>12</sub> 156-159°. Bp<sub>1.6</sub> 118-119°

>>Derivative: Amide

CAS Registry Number: 13052-97-6

Molecular Formula: C<sub>11</sub>H<sub>13</sub>NO

Molecular Weight: 175.23

Accurate Mass: 175.099714

Percentage Composition: C 75.40%; H 7.48%; N 7.99%; O 9.13%

Physical Description: Cryst. (H<sub>2</sub>O)

Melting Point: Mp 182°

>>Derivative: Nitrile

Synonym(s): 5-Cyanotetralin

CAS Registry Number: 29809-13-0

Molecular Formula: C<sub>11</sub>H<sub>11</sub>N

Molecular Weight: 157.215

Accurate Mass: 157.089149

Percentage Composition: C 84.04%; H 7.05%; N 8.91%

Boiling Point: Bp<sub>721</sub> 277-279°

#### References:

Bamberger, E. *et al.*, *Ber.*, 1889, **22**, 6250

Dauben, W.G. *et al.*, *J.A.C.S.*, 1951, **73**, 1393, (*uv*)

Letsinger, R.L. *et al.*, *J.O.C.*, 1960, **25**, 1844

Wightman, R.H. *et al.*, *J.O.C.*, 1978, **43**, 2167, (*synth*, *pmr*)

Connolly, T.J. *et al.*, *Tetrahedron*, 1997, **53**, 15969-15982, (*synth*, *pmr*, *cmr*)