

D-alanine, n-(5-chlorovaleryl)-, heptyl ester

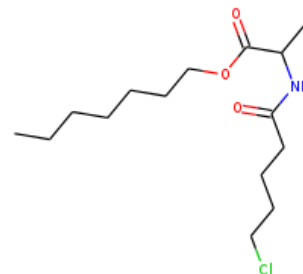
InChI: InChI=1S/C15H28ClNO3/c1-3-4-5-6-9-12-20-15(19)13(2)17-14(18)10-7-8-11-16/h13H,3-12H2,1-2H3,(H,17,18)

InChI Key: KOFVZRFXZTVRON-UHFFFAOYSA-N

Formula: C₁₅H₂₈ClNO₃

SMILES: CCCCCCOC(=O)C(C)NC(=O)CCCCCl

Molecular Weight: 305.84



Physical Properties

| Property | Value | Unit | Source |
|---------------------------------|---------|------------------------|----------------|
| $\Delta_f G^\circ$ | -212.40 | kJ/mol | Joback Method |
| $\Delta_f H^\circ_{\text{gas}}$ | -677.86 | kJ/mol | Joback Method |
| $\Delta_{\text{fus}} H^\circ$ | 44.76 | kJ/mol | Joback Method |
| $\Delta_{\text{vap}} H^\circ$ | 75.32 | kJ/mol | Joback Method |
| $\log P_{\text{oct/wat}}$ | 3.41 | | Crippen Method |
| P_c | 1519.94 | kPa | Joback Method |
| T_{boil} | 759.92 | K | Joback Method |
| T_c | 945.97 | K | Joback Method |
| T_{fus} | 448.48 | K | Joback Method |
| V_c | 0.98 | m ³ /kg-mol | Joback Method |

Temperature Dependent Properties

| Property | Value | Unit | Temperature (K) | Source |
|--------------------|--------|---------|-----------------|---------------|
| $C_{p,\text{gas}}$ | 738.55 | J/mol×K | 759.92 | Joback Method |

Sources

Joback Method: https://en.wikipedia.org/wiki/Joback_method

NIST Webbook: [http://webbook.nist.gov/cgi/inchi/InChI=1S/C15H28ClNO3/c1-3-4-5-6-9-12-20-15\(19\)13\(2\)17-14\(18\)10-7-8-11-16/h13H,3-12H2,1-2H3,\(H,17,18\)](http://webbook.nist.gov/cgi/inchi/InChI=1S/C15H28ClNO3/c1-3-4-5-6-9-12-20-15(19)13(2)17-14(18)10-7-8-11-16/h13H,3-12H2,1-2H3,(H,17,18))

Crippen Method: <http://pubs.acs.org/doi/abs/10.1021/ci9903071>

Legend

$C_{p, gas}$: Ideal gas heat capacity (J/mol×K).

$\Delta_f G^\circ$: Standard Gibbs free energy of formation (kJ/mol).

$\Delta_f H^\circ_{gas}$: Enthalpy of formation at standard conditions (kJ/mol).

$\Delta_{fus} H^\circ$: Enthalpy of fusion at standard conditions (kJ/mol).

$\Delta_{vap} H^\circ$: Enthalpy of vaporization at standard conditions (kJ/mol).

$logP_{oct/wat}$: Octanol/Water partition coefficient .

P_c : Critical Pressure (kPa).

T_{boil} : Normal Boiling Point Temperature (K).

T_c : Critical Temperature (K).

T_{fus} : Normal melting (fusion) point (K).

V_c : Critical Volume (m³/kg-mol).

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