

Adipic acid, 2,2-dichloroethyl ethyl ester

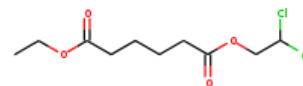
InChI: InChI=1S/C10H16Cl2O4/c1-2-15-9(13)5-3-4-6-10(14)16-7-8(11)12/h8H,2-7H2,1H3

InChI Key: OOGYTZLFFXWBIU-UHFFFAOYSA-N

Formula: C10H16Cl2O4

SMILES: CCOC(=O)CCCCC(=O)OCC(Cl)Cl

Molecular Weight: 271.14



Physical Properties

Property	Value	Unit	Source
$\Delta_f G^\circ$	-460.82	kJ/mol	Joback Method
$\Delta_f H^\circ_{\text{gas}}$	-776.09	kJ/mol	Joback Method
$\Delta_{\text{fus}} H^\circ$	32.10	kJ/mol	Joback Method
$\Delta_{\text{vap}} H^\circ$	64.55	kJ/mol	Joback Method
$\log P_{\text{oct/wat}}$	2.46		Crippen Method
P_c	2159.31	kPa	Joback Method
T_{boil}	655.20	K	Joback Method
T_c	847.01	K	Joback Method
T_{fus}	391.62	K	Joback Method
V_c	0.74	m ³ /kg-mol	Joback Method

Temperature Dependent Properties

Property	Value	Unit	Temperature (K)	Source
$C_{p,\text{gas}}$	470.31	J/mol×K	655.2	Joback Method
η	0.00	Paxs	655.2	Joback Method

Sources

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

NIST Webbook: [http://webbook.nist.gov/cgi/inchi/InChI=1S/C10H16Cl2O4/c1-2-15-9\(13\)5-3-4-6-10\(14\)16-7-8\(11\)12/h8H,2-7H2,1H3](http://webbook.nist.gov/cgi/inchi/InChI=1S/C10H16Cl2O4/c1-2-15-9(13)5-3-4-6-10(14)16-7-8(11)12/h8H,2-7H2,1H3)

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

Legend

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

η : Dynamic viscosity (Pa \times s).

$\Delta_f G^\circ$: 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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