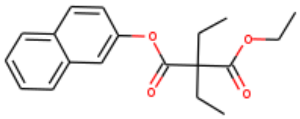
Diethylmalonic acid, ethyl 2-naphthyl ester

InChI: InChI=1S/C19H22O4/c1-4-19(5-2,17(20)22-6-3)18(21)23-16-12-11
-14-9-7-8-10-15(14)13-16/h7-13H,4-6H2,1-3H3
InChI Key: RPKXORQKGLZGBS-UHFFFAOYSA-N
Formula: C19H22O4
SMILES: CCOC(=O)C(CC)(CC)C(=O)Oc1ccc2ccccc2c1
Molecular Weight: 314.38



Physical Properties

Property	Value	Unit	Source
$\Delta_f G°$	-146.47	kJ/mol	Joback Method
$\Delta_f H°_{gas}$	-517.71	kJ/mol	Joback Method
$\Delta_{fus} H°$	33.80	kJ/mol	Joback Method
$\Delta_{vap} H°$	79.48	kJ/mol	Joback Method
$logP_{oct/wat}$	4.11		Crippen Method
P_c	1780.34	kPa	Joback Method
T_{boil}	834.11	K	Joback Method
T_c	1057.24	K	Joback Method
T_{fus}	522.27	K	Joback Method
V_c	0.95	m^3/kg-mol	Joback Method

Temperature Dependent Properties

Property	Value	Unit	Temperature (K)	Source
$C_{p,gas}$	746.82	J/mol×K	834.11	Joback Method
η	0.00	Pa×s	834.11	Joback Method

Sources

Joback Method: https://en.wikipedia.org/wiki/Joback_method
NIST Webbook: http://webbook.nist.gov/cgi/inchi/InChI=1S/C19H22O4/c1-4-19(5-2,17(20)22-6-3)18(21)23-16-12-11-14-9-7-8-10-15(14)13-16/h7-13H,4-6H2,1-3H3
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

$\mathbf{C_{p,gas}}$: Ideal gas heat capacity (J/mol×K).
η: Dynamic viscosity (Pa×s).
$\Delta_f\mathbf{G°}$: Standard Gibbs free energy of formation (kJ/mol).
$\Delta_f\mathbf{H°_{gas}}$: Enthalpy of formation at standard conditions (kJ/mol).
$\Delta_{fus}\mathbf{H°}$: Enthalpy of fusion at standard conditions (kJ/mol).
$\Delta_{vap}\mathbf{H°}$: Enthalpy of vaporization at standard conditions (kJ/mol).
$\boldsymbol{log}\mathbf{P_{oct/wat}}$: Octanol/Water partition coefficient .
$\mathbf{P_c}$: Critical Pressure (kPa).
$\mathbf{T_{boil}}$: Normal Boiling Point Temperature (K).
$\mathbf{T_c}$: Critical Temperature (K).
$\mathbf{T_{fus}}$: Normal melting (fusion) point (K).
$\mathbf{V_c}$: Critical Volume (m^3/kg-mol).