

Sebacic acid, 2-hexyl pentadecyl ester

InChI: InChI=1S/C31H60O4/c1-4-6-8-9-10-11-12-13-14-15-18-21-24-28-34-30(32)26-22-19-16-17-20-23-27-31(33)35-29(3)25-7-5-2/h29H,4-28H2,1-3H3

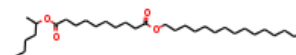
InChI Key: RNWKLGRMLBVKEQ-UHFFFAOYSA-N

Formula: C₃₁H₆₀O₄

SMILES:

CCCCCCCCCCCCCCCCOC(=O)CCCCCCCCC(=O)OC(C)CCCC

Molecular Weight: 496.81



Physical Properties

Property	Value	Unit	Source
$\Delta_f G^\circ$	-260.14	kJ/mol	Joback Method
$\Delta_f H^\circ_{\text{gas}}$	-1178.05	kJ/mol	Joback Method
$\Delta_{\text{fus}} H^\circ$	78.10	kJ/mol	Joback Method
$\Delta_{\text{vap}} H^\circ$	102.52	kJ/mol	Joback Method
$\log P_{\text{oct/wat}}$	9.863		Crippen Method
P_c	596.63	kPa	Joback Method
T_{boil}	1060.82	K	Joback Method
T_c	1339.85	K	Joback Method
T_{fus}	568.45	K	Joback Method
V_c	1.813	m ³ /kg-mol	Joback Method

Temperature Dependent Properties

Property	Value	Unit	Temperature (K)	Source
$C_{p,\text{gas}}$	1671.04	J/mol×K	1060.82	Joback Method
η	0.0000088	Paxs	1060.82	Joback Method

Sources

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

NIST Webbook: [http://webbook.nist.gov/cgi/inchi/InChI=1S/C31H60O4/c1-4-6-8-9-10-11-12-13-14-15-18-21-24-28-34-30\(32\)26-22-19-16-17-20-23-27-31\(33\)35-29\(3\)25-7-5-2/h29H,4-28H2,1-3H3](http://webbook.nist.gov/cgi/inchi/InChI=1S/C31H60O4/c1-4-6-8-9-10-11-12-13-14-15-18-21-24-28-34-30(32)26-22-19-16-17-20-23-27-31(33)35-29(3)25-7-5-2/h29H,4-28H2,1-3H3)

Crippen Method: <http://pubs.acs.org/doi/abs/10.1021/ci990307l>

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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