Succinic acid, 2,3-dimethylphenyl octadecyl ester

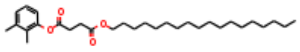
InChI: InChI=1S/C30H50O4/c1-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-25-33-29(31)23-24-30(32)34-28-22-20-21-26(2)27(28)3/h20-22H,4-19,23-25H2,1-3H3

InChI Key: GAMVMNKXFDZKBD-UHFFFAOYSA-N

Formula: C30H50O4

SMILES: CCCCCCCCCCCCCCCCCCOC(=O)CCC(=O)Oc1cccc(C)c1C

Molecular Weight: 474.72



Physical Properties

Property	Value	Unit	Source
$\Delta_f G°$	-172.97	kJ/mol	Joback Method
$\Delta_f H°_{gas}$	-938.54	kJ/mol	Joback Method
$\Delta_{fus} H°$	72.29	kJ/mol	Joback Method
$\Delta_{vap} H°$	104.29	kJ/mol	Joback Method
$logP_{oct/wat}$	8.79		Crippen Method
P_c	728.49	kPa	Joback Method
T_{boil}	1075.02	K	Joback Method
T_c	1331.15	K	Joback Method
T_{fus}	623.64	K	Joback Method
V_c	1.66	m^3/kg-mol	Joback Method

Temperature Dependent Properties

Property	Value	Unit	Temperature (K)	Source
$C_{p,gas}$	1496.08	J/mol×K	1075.02	Joback Method
η	0.00	Pa×s	1075.02	Joback Method

Sources

Joback Method: https://en.wikipedia.org/wiki/Joback_method
NIST Webbook: http://webbook.nist.gov/cgi/inchi/InChI=1S/C30H50O4/c1-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-25-33-29(31)23-24-30(32)34-28-22-20-21-26(2)27(28)3/h20-22H,4-19,23-25H2,1-3H3
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

$C_{p,gas}$: Ideal gas heat capacity (J/mol×K).
η: Dynamic viscosity (Pa×s).
$\Delta_f G°$: Standard Gibbs free energy of formation (kJ/mol).
$\Delta_f H°_{gas}$: Enthalpy of formation at standard conditions (kJ/mol).
$\Delta_{fus} H°$: Enthalpy of fusion at standard conditions (kJ/mol).
$\Delta_{vap} H°$: 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 (m^3/kg-mol).