

Isophthalic acid, 3,3-dimethylbut-2-yl dodecyl ester

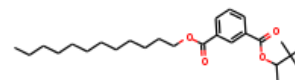
InChI: InChI=1S/C26H42O4/c1-6-7-8-9-10-11-12-13-14-15-19-29-24(27)2
2-17-16-18-23(20-22)25(28)30-21(2)26(3,4)5/h16-18,20-21H,6-15,19H2,1
-5H3

InChI Key: KJOGNTRKUYZRCC-UHFFFAOYSA-N

Formula: C₂₆H₄₂O₄

SMILES: CCCCCCCCCCOC(=O)c1cccc(C(=O)OC(C)C(C)(C)C)c1

Molecular Weight: 418.61



Physical Properties

Property	Value	Unit	Source
$\Delta_f G^\circ$	-196.62	kJ/mol	Joback Method
$\Delta_f H^\circ_{\text{gas}}$	-858.54	kJ/mol	Joback Method
$\Delta_{\text{fus}} H^\circ$	51.38	kJ/mol	Joback Method
$\Delta_{\text{vap}} H^\circ$	93.04	kJ/mol	Joback Method
$\log P_{\text{oct/wat}}$	7.36		Crippen Method
P_c	930.07	kPa	Joback Method
T_{boil}	974.85	K	Joback Method
T_c	1193.64	K	Joback Method
T_{fus}	553.46	K	Joback Method
V_c	1.41	m ³ /kg-mol	Joback Method

Temperature Dependent Properties

Property	Value	Unit	Temperature (K)	Source
$C_{p,\text{gas}}$	1243.96	J/mol×K	974.85	Joback Method
η	0.00	Paxs	974.85	Joback Method

Sources

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

NIST Webbook: [http://webbook.nist.gov/cgi/inchi/InChI=1S/C26H42O4/c1-6-7-8-9-10-11-12-13-14-15-19-29-24\(27\)22-17-16-18-23\(20-22\)25\(28\)30-21\(2\)26\(3,4\)5/h16-18,20-21H,6-15,19H2,1-5H3](http://webbook.nist.gov/cgi/inchi/InChI=1S/C26H42O4/c1-6-7-8-9-10-11-12-13-14-15-19-29-24(27)22-17-16-18-23(20-22)25(28)30-21(2)26(3,4)5/h16-18,20-21H,6-15,19H2,1-5H3)

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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