

Glutaric acid, decyl 4-fluorobenzyl ester

Inchi:	InChI=1S/C22H33FO4/c1-2-3-4-5-6-7-8-9-17-26-21(24)11-10-12-22(25)27-18-19-13-15-2
InchiKey:	RLUBCCRARAJCFG-UHFFFAOYSA-N
Formula:	C22H33FO4
SMILES:	CCCCCCCCCOC(=O)CCCC(=O)OCc1ccc(F)cc1
Mol. weight [g/mol]:	380.49

Physical Properties

Property code	Value	Unit	Source
gf	-425.51	kJ/mol	Joback Method
hf	-958.06	kJ/mol	Joback Method
hfus	55.04	kJ/mol	Joback Method
hvap	85.00	kJ/mol	Joback Method
log10ws	-6.69		Crippen Method
logp	5.723		Crippen Method
mcvol	313.730	ml/mol	McGowan Method
pc	1135.96	kPa	Joback Method
rinsol	2750.00		NIST Webbook
tb	886.27	K	Joback Method
tc	1087.24	K	Joback Method
tf	521.55	K	Joback Method
vc	1.226	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1004.47	J/mol×K	886.27	Joback Method
cpg	1020.74	J/mol×K	919.76	Joback Method
cpg	1035.81	J/mol×K	953.26	Joback Method
cpg	1049.70	J/mol×K	986.75	Joback Method
cpg	1062.44	J/mol×K	1020.25	Joback Method
cpg	1074.06	J/mol×K	1053.74	Joback Method
cpg	1084.59	J/mol×K	1087.24	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U377479&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307I
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

Legend

cpg:	Ideal gas heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
rinpola:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

Latest version available from:

<https://www.chemeo.com/cid/30-544-4/Glutaric-acid-decyl-4-fluorobenzyl-ester.pdf>

Generated by Cheméo on 2024-04-24 15:33:52.108502764 +0000 UTC m=+16262081.029080076.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.