

Carbonic acid, decyl tridecyl ester

Inchi:	InChI=1S/C24H48O3/c1-3-5-7-9-11-13-14-15-17-19-21-23-27-24(25)26-22-20-18-16-12-
InchiKey:	PEHNMRQCEFCHOD-UHFFFAOYSA-N
Formula:	C24H48O3
SMILES:	CCCCCCCCCCCCOC(=O)OCCCCCCCCC
Mol. weight [g/mol]:	384.64

Physical Properties

Property code	Value	Unit	Source
gf	-187.72	kJ/mol	Joback Method
hf	-915.71	kJ/mol	Joback Method
hfus	61.89	kJ/mol	Joback Method
hvap	80.58	kJ/mol	Joback Method
log10ws	-8.80		Crippen Method
logp	8.591		Crippen Method
mvol	362.330	ml/mol	McGowan Method
pc	819.60	kPa	Joback Method
rinpol	2616.00		NIST Webbook
rinpol	2616.00		NIST Webbook
tb	847.23	K	Joback Method
tc	1037.50	K	Joback Method
tf	454.63	K	Joback Method
vc	1.421	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1190.98	J/molxK	847.23	Joback Method
cpg	1212.56	J/molxK	878.94	Joback Method
cpg	1232.87	J/molxK	910.65	Joback Method
cpg	1251.94	J/molxK	942.37	Joback Method
cpg	1269.81	J/molxK	974.08	Joback Method
cpg	1286.49	J/molxK	1005.79	Joback Method
cpg	1302.03	J/molxK	1037.50	Joback Method
dvisc	0.0007056	Paxs	454.63	Joback Method

dvisc	0.0003025	Paxs	520.06	Joback Method
dvisc	0.0001567	Paxs	585.50	Joback Method
dvisc	0.0000926	Paxs	650.93	Joback Method
dvisc	0.0000603	Paxs	716.36	Joback Method
dvisc	0.0000422	Paxs	781.80	Joback Method
dvisc	0.0000312	Paxs	847.23	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U383162&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

Legend

cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
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
rinpol:	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/95-777-5/Carbonic-acid-decyl-tridecyl-ester.pdf>

Generated by Cheméo on 2024-04-26 20:15:47.115097082 +0000 UTC m=+16451796.035674397.

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