6-METHYLTRICOSANE

Other names: Tricosane, 6-methyl
Inchi: InChI=1S/C24H50/c1-4-6-8-9-10-11-12-13-14-15-16-17-18-19-21-23-24(3)22-20-7-5-2/h2
InchiKey: JYFRSHVPSIXWNW-UHFFFAOYSA-N
Formula: C24H50
SMILES: CCCCCCCCCCCCCCCCCC(C)CCCCC
Mol. weight [g/mol]: 338.66

Physical Properties

Property code	Value	Unit	Source
af	0.9560		Cheméo Relay (1.0)
gf	148.76	kJ/mol	Joback Method
hf	-550.06	kJ/mol	Cheméo Relay (1.0)
hfus	54.39	kJ/mol	Joback Method
hvap	116.08	kJ/mol	Cheméo Relay (1.0)
ie	9.84	eV	Cheméo Relay (1.0)
log10ws	-9.66		Cheméo Relay (1.0)
logp	9.464		Crippen Method
mcvol	349.020	ml/mol	McGowan Method
pc	809.83	kPa	Joback Method
rinpol	2347.90		NIST Webbook
rinpol	2347.90		NIST Webbook
tb	601.32	K	Cheméo Relay (1.0)
tc	772.85	K	Cheméo Relay (1.0)
tf	285.92	K	Cheméo Relay (1.0)
vc	1.377	m3/kmol	Cheméo Relay (1.0)

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1087.86	J/mol×K	748.08	Joback Method
cpg	1110.78	J/mol×K	776.44	Joback Method
cpg	1132.66	J/mol×K	804.79	Joback Method
cpg	1153.54	J/mol×K	833.15	Joback Method
cpg	1173.45	J/mol×K	861.51	Joback Method

cpg	1192.43	J/mol×K	889.86	Joback Method
cpg	1210.52	J/mol×K	918.22	Joback Method
dvisc	0.0031119	Pa×s	345.24	Joback Method
dvisc	0.0009096	Pa×s	412.38	Joback Method
dvisc	0.0003752	Pa×s	479.52	Joback Method
dvisc	0.0001924	Pa×s	546.66	Joback Method
dvisc	0.0001142	Pa×s	613.80	Joback Method
dvisc	0.0000751	Pa×s	680.94	Joback Method
dvisc	0.0000532	Pa×s	748.08	Joback Method

Sources

Cheméo Relay (1.0, beta):

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=U131180&Units=SI

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

McGowan Method: http://link.springer.com/article/10.1007/BF02311772

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

Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

Cheméo Relay (1.0):

Legend

af: Acentric Factor
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
ie: Ionization energy
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