

Heneicosane, 11-(1-ethylpropyl)-

Other names:	11-(1-Ethylpropyl)heneicosane 11-(3'-n-Pentyl)heneicosane
Inchi:	InChI=1S/C26H54/c1-5-9-11-13-15-17-19-21-23-26(25(7-3)8-4)24-22-20-18-16-14-12-10
InchiKey:	YAOSHAWMYFELSJ-UHFFFAOYSA-N
Formula:	C26H54
SMILES:	CCCCCCCCCCC(CCCCCCCCCC)C(CC)CC
Mol. weight [g/mol]:	366.71
CAS:	55282-11-6

Physical Properties

Property code	Value	Unit	Source
gf	163.16	kJ/mol	Joback Method
hf	-590.53	kJ/mol	Joback Method
hfus	56.05	kJ/mol	Joback Method
hvap	72.69	kJ/mol	Joback Method
log10ws	-10.22		Crippen Method
logp	10.100		Crippen Method
mvol	377.200	ml/mol	McGowan Method
pc	731.25	kPa	Joback Method
tb	793.40	K	Joback Method
tc	971.62	K	Joback Method
tf	352.78	K	Joback Method
vc	1.480	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1217.07	J/molxK	793.40	Joback Method
cpg	1241.13	J/molxK	823.10	Joback Method
cpg	1264.02	J/molxK	852.81	Joback Method
cpg	1285.78	J/molxK	882.51	Joback Method
cpg	1306.47	J/molxK	912.22	Joback Method
cpg	1326.13	J/molxK	941.92	Joback Method
cpg	1344.80	J/molxK	971.62	Joback Method

dvisc	0.0031975	Paxs	352.78	Joback Method
dvisc	0.0008010	Paxs	426.22	Joback Method
dvisc	0.0003014	Paxs	499.65	Joback Method
dvisc	0.0001457	Paxs	573.09	Joback Method
dvisc	0.0000831	Paxs	646.53	Joback Method
dvisc	0.0000531	Paxs	719.96	Joback Method
dvisc	0.0000369	Paxs	793.40	Joback Method
hvapt	93.50	kJ/mol	491.50	NIST Webbook

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C55282116&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

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
hvapt:	Enthalpy of vaporization at a given temperature
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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