

m-xylene, 4-propyl-

Inchi:	InChI=1S/C11H16/c1-4-5-11-7-6-9(2)8-10(11)3/h6-8H,4-5H2,1-3H3
InchiKey:	HPAXKQMKDWCLGU-UHFFFAOYSA-N
Formula:	C11H16
SMILES:	CCc1ccc(C)cc1C
Mol. weight [g/mol]:	148.24
CAS:	61827-85-8

Physical Properties

Property code	Value	Unit	Source
gf	134.89	kJ/mol	Joback Method
hf	-56.78	kJ/mol	Joback Method
hfus	17.51	kJ/mol	Joback Method
hvap	43.68	kJ/mol	Joback Method
log10ws	-3.64		Crippen Method
logp	3.256		Crippen Method
mcvol	142.090	ml/mol	McGowan Method
pc	2568.89	kPa	Joback Method
tb	481.40 ± 6.00	K	NIST Webbook
tc	692.15	K	Joback Method
tf	265.19	K	Joback Method
vc	0.543	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	301.47	J/mol×K	487.72	Joback Method
cpg	316.73	J/mol×K	521.79	Joback Method
cpg	331.23	J/mol×K	555.86	Joback Method
cpg	345.01	J/mol×K	589.93	Joback Method
cpg	358.09	J/mol×K	624.00	Joback Method
cpg	370.48	J/mol×K	658.08	Joback Method
cpg	382.22	J/mol×K	692.15	Joback Method
dvisc	0.0018138	Paxs	265.19	Joback Method
dvisc	0.0010046	Paxs	302.28	Joback Method

dvisc	0.0006331	Paxs	339.37	Joback Method
dvisc	0.0004370	Paxs	376.46	Joback Method
dvisc	0.0003223	Paxs	413.54	Joback Method
dvisc	0.0002500	Paxs	450.63	Joback Method
dvisc	0.0002015	Paxs	487.72	Joback Method

Sources

Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C61827858&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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