

2,3,5-Trimethylheptane, erythro

Inchi:	InChI=1S/C10H22/c1-6-9(4)7-10(5)8(2)3/h8-10H,6-7H2,1-5H3/t9-,10-/m0/s1
InchiKey:	YKPNYFKOKKKGNM-UWVGGGRQHS-A-N
Formula:	C10H22
SMILES:	CCC(C)CC(C)C(C)C
Mol. weight [g/mol]:	142.28

Physical Properties

Property code	Value	Unit	Source
gf	26.00	kJ/mol	Joback Method
hf	-265.57	kJ/mol	Joback Method
hfus	11.09	kJ/mol	Joback Method
hvap	36.69	kJ/mol	Joback Method
log10ws	-3.28		Crippen Method
logp	3.715		Crippen Method
mvol	151.760	ml/mol	McGowan Method
pc	2155.30	kPa	Joback Method
rinpol	912.30		NIST Webbook
tb	426.88	K	Joback Method
tc	600.24	K	Joback Method
tf	157.46	K	Joback Method
vc	0.578	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	315.23	J/molxK	426.88	Joback Method
cpg	331.59	J/molxK	455.77	Joback Method
cpg	347.31	J/molxK	484.67	Joback Method
cpg	362.39	J/molxK	513.56	Joback Method
cpg	376.87	J/molxK	542.45	Joback Method
cpg	390.75	J/molxK	571.35	Joback Method
cpg	404.05	J/molxK	600.24	Joback Method
dvisc	0.0495825	Paxs	157.46	Joback Method
dvisc	0.0072381	Paxs	202.36	Joback Method

dvisc	0.0021254	Paxs	247.27	Joback Method
dvisc	0.0009096	Paxs	292.17	Joback Method
dvisc	0.0004880	Paxs	337.07	Joback Method
dvisc	0.0003031	Paxs	381.98	Joback Method
dvisc	0.0002081	Paxs	426.88	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=R294761&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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