

Cyclohexane, (3-methylpentyl)-

Inchi:	InChI=1S/C12H24/c1-3-11(2)9-10-12-7-5-4-6-8-12/h11-12H,3-10H2,1-2H3
InchiKey:	XYKJVHTUQQONLW-UHFFFAOYSA-N
Formula:	C12H24
SMILES:	CCC(C)CCC1CCCCC1
Mol. weight [g/mol]:	168.32
CAS:	61142-38-9

Physical Properties

Property code	Value	Unit	Source
gf	72.17	kJ/mol	Joback Method
hf	-241.97	kJ/mol	Joback Method
hfus	15.15	kJ/mol	Joback Method
hvap	42.35	kJ/mol	Joback Method
log10ws	-4.26		Crippen Method
logp	4.393		Crippen Method
mcvol	169.080	ml/mol	McGowan Method
pc	2149.31	kPa	Joback Method
tb	493.07	K	Joback Method
tc	689.56	K	Joback Method
tf	217.38	K	Joback Method
vc	0.634	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	395.27	J/molxK	493.07	Joback Method
cpg	416.72	J/molxK	525.82	Joback Method
cpg	437.11	J/molxK	558.57	Joback Method
cpg	456.47	J/molxK	591.32	Joback Method
cpg	474.84	J/molxK	624.07	Joback Method
cpg	492.25	J/molxK	656.82	Joback Method
cpg	508.72	J/molxK	689.56	Joback Method
dvisc	0.0136850	Paxs	217.38	Joback Method
dvisc	0.0037811	Paxs	263.33	Joback Method

dvisc	0.0015310	Paxs	309.28	Joback Method
dvisc	0.0007833	Paxs	355.23	Joback Method
dvisc	0.0004672	Paxs	401.17	Joback Method
dvisc	0.0003099	Paxs	447.12	Joback Method
dvisc	0.0002219	Paxs	493.07	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C61142389&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
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
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

Latest version available from:

<https://www.chemeo.com/cid/79-430-7/Cyclohexane-3-methylpentyl.pdf>

Generated by Cheméo on 2024-04-18 00:11:05.563319456 +0000 UTC m=+15688314.483896768.

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