

Benzene, chloro, 1,2-dimethyl, 4-(1,1-dimethylethyl)

Inchi:	InChI=1S/C12H17Cl/c1-8-6-10(12(3,4)5)7-11(13)9(8)2/h6-7H,1-5H3
InchiKey:	FQYVVVTUJLJWGJX-UHFFFAOYSA-N
Formula:	C12H17Cl
SMILES:	Cc1cc(C(C)(C)C)cc(Cl)c1C
Mol. weight [g/mol]:	196.72

Physical Properties

Property code	Value	Unit	Source
gf	124.59	kJ/mol	Joback Method
hf	-113.38	kJ/mol	Joback Method
hfus	16.49	kJ/mol	Joback Method
hvap	49.66	kJ/mol	Joback Method
log10ws	-4.42		Crippen Method
logp	4.254		Crippen Method
mcvol	168.420	ml/mol	McGowan Method
pc	2263.26	kPa	Joback Method
rinpol	1400.00		NIST Webbook
rinpol	1392.00		NIST Webbook
rinpol	1388.00		NIST Webbook
rinpol	1388.00		NIST Webbook
tb	549.78	K	Joback Method
tc	770.39	K	Joback Method
tf	321.32	K	Joback Method
vc	0.637	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	379.95	J/molxK	549.78	Joback Method
cpg	396.03	J/molxK	586.55	Joback Method
cpg	411.12	J/molxK	623.32	Joback Method
cpg	425.28	J/molxK	660.09	Joback Method
cpg	438.55	J/molxK	696.85	Joback Method
cpg	450.98	J/molxK	733.62	Joback Method

cpg	462.63	J/mol×K	770.39	Joback Method
dvisc	0.0016810	Paxs	321.32	Joback Method
dvisc	0.0009497	Paxs	359.40	Joback Method
dvisc	0.0005985	Paxs	397.47	Joback Method
dvisc	0.0004089	Paxs	435.55	Joback Method
dvisc	0.0002970	Paxs	473.63	Joback Method
dvisc	0.0002263	Paxs	511.70	Joback Method
dvisc	0.0001790	Paxs	549.78	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R131561&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
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

Latest version available from:

<https://www.chemeo.com/cid/60-657-6/Benzene-chloro-1-2-dimethyl-4-1-1-dimethylethyl.pdf>

Generated by Cheméo on 2024-04-24 07:47:28.321103132 +0000 UTC m=+16234097.241680447.

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