1,3-Difluoro-2-propanol

Other names:	1,3-Difluoroisopropanol
	2-Propanol, 1,3-difluoro-
	1,3-difluoropropan-2-ol
Inchi:	InChI=1S/C3H6F2O/c4-1-3(6)2-5/h3,6H,1-2H2
InchiKey:	PVDLUGWWIOGCNH-UHFFFAOYSA-N
Formula:	C3H6F2O
SMILES:	OC(CF)CF
Mol. weight [g/mol]:	96.08
CAS:	453-13-4

Physical Properties

Property code	Value	Unit	Source
gf	-554.50	kJ/mol	Joback Method
hf	-654.98	kJ/mol	Joback Method
hfus	10.25	kJ/mol	Joback Method
hvap	36.93	kJ/mol	Joback Method
log10ws	-0.16		Crippen Method
logp	0.286		Crippen Method
mcvol	62.540	ml/mol	McGowan Method
pc	4468.24	kPa	Joback Method
tb	358.32	K	Joback Method
tc	507.12	K	Joback Method
tf	170.57	K	Joback Method
vc	0.253	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	117.84	J/mol×K	358.32	Joback Method
cpg	123.25	J/mol×K	383.12	Joback Method
cpg	128.47	J/mol×K	407.92	Joback Method
cpg	133.51	J/mol×K	432.72	Joback Method
cpg	138.37	J/mol×K	457.52	Joback Method
cpg	143.05	J/mol×K	482.32	Joback Method

cpg	147.55	J/mol×K	507.12	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	327.70	K	4.50	NIST Webbook

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=C453134&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
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
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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