

# 2-Butanone, 3-hydroxy-, (R)-

<b>Inchi:</b>	InChI=1S/C4H8O2/c1-3(5)4(2)6/h3,5H,1-2H3/t3-/m0/s1
<b>InchiKey:</b>	ROWKJAVDOGWPAT-VKHKMYHEASA-N
<b>Formula:</b>	C4H8O2
<b>SMILES:</b>	CC(=O)C(C)O
<b>Mol. weight [g/mol]:</b>	88.11
<b>CAS:</b>	53584-56-8

## Physical Properties

Property code	Value	Unit	Source
gf	-285.38	kJ/mol	Joback Method
hf	-395.98	kJ/mol	Joback Method
hfus	8.28	kJ/mol	Joback Method
hvap	47.53	kJ/mol	Joback Method
log10ws	-0.15		Crippen Method
logp	-0.044		Crippen Method
mcvol	74.660	ml/mol	McGowan Method
pc	4829.24	kPa	Joback Method
tb	416.20	K	NIST Webbook
tc	614.26	K	Joback Method
tf	230.59	K	Joback Method
vc	0.279	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	146.25	J/molxK	436.53	Joback Method
cpg	153.06	J/molxK	466.15	Joback Method
cpg	159.59	J/molxK	495.77	Joback Method
cpg	165.85	J/molxK	525.39	Joback Method
cpg	171.84	J/molxK	555.02	Joback Method
cpg	177.58	J/molxK	584.64	Joback Method
cpg	183.06	J/molxK	614.26	Joback Method
dvisc	0.0663519	Paxs	230.59	Joback Method
dvisc	0.0146308	Paxs	264.91	Joback Method

dvisc	0.0045636	Paxs	299.24	Joback Method
dvisc	0.0018091	Paxs	333.56	Joback Method
dvisc	0.0008524	Paxs	367.88	Joback Method
dvisc	0.0004566	Paxs	402.21	Joback Method
dvisc	0.0002698	Paxs	436.53	Joback Method

## Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	322.40	K	2.70	NIST Webbook

## Sources

<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</a>
<b>Crippen Method:</b>	<a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>
<b>Joback Method:</b>	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>
<b>McGowan Method:</b>	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C53584568&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C53584568&amp;Units=SI</a>

## Legend

<b>cpg:</b>	Ideal gas heat capacity
<b>dvisc:</b>	Dynamic viscosity
<b>gf:</b>	Standard Gibbs free energy of formation
<b>hf:</b>	Enthalpy of formation at standard conditions
<b>hfus:</b>	Enthalpy of fusion at standard conditions
<b>hvap:</b>	Enthalpy of vaporization at standard conditions
<b>log10ws:</b>	Log10 of Water solubility in mol/l
<b>logp:</b>	Octanol/Water partition coefficient
<b>mcvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>tb:</b>	Normal Boiling Point Temperature
<b>tbrp:</b>	Boiling point at reduced pressure
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point

**vc:** Critical Volume

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