

# Alpha-d-xylopyranose

<b>Other names:</b>	«alpha»-D-Xylopyranose D-Xylose xylopyranose, «alpha»-D-
<b>Inchi:</b>	InChI=1S/C5H10O5/c6-2-1-10-5(9)4(8)3(2)7/h2-9H,1H2/t2-,3+,4-,5+/m0/s1
<b>InchiKey:</b>	SRBFZHDQGSBBOR-SKNVOMKLSA-N
<b>Formula:</b>	C5H10O5
<b>SMILES:</b>	OC1COC(O)C(O)C1O
<b>Mol. weight [g/mol]:</b>	150.13
<b>CAS:</b>	6763-34-4

## Physical Properties

Property code	Value	Unit	Source
gf	-640.86	kJ/mol	Joback Method
hf	-894.15	kJ/mol	Joback Method
hfus	28.08	kJ/mol	Joback Method
hvap	97.45	kJ/mol	Joback Method
log10ws	1.11		Crippen Method
logp	-2.582		Crippen Method
mcvol	99.800	ml/mol	McGowan Method
pc	6577.70	kPa	Joback Method
tb	715.01	K	Joback Method
tc	890.42	K	Joback Method
tf	410.62	K	Joback Method
vc	0.343	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	319.94	J/molxK	715.01	Joback Method
cpg	354.27	J/molxK	861.19	Joback Method
cpg	348.29	J/molxK	831.95	Joback Method
cpg	341.88	J/molxK	802.72	Joback Method
cpg	335.01	J/molxK	773.48	Joback Method
cpg	327.70	J/molxK	744.25	Joback Method

cpg	359.79	J/mol×K	890.42	Joback Method
dvisc	0.0000023	Paxs	715.01	Joback Method
dvisc	0.0000049	Paxs	664.28	Joback Method
dvisc	0.0000121	Paxs	613.55	Joback Method
dvisc	0.0000353	Paxs	562.82	Joback Method
dvisc	0.0001268	Paxs	512.08	Joback Method
dvisc	0.0006037	Paxs	461.35	Joback Method
dvisc	0.0042271	Paxs	410.62	Joback Method

## Sources

<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=C6763344&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C6763344&amp;Units=SI</a>
<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>

## 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>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

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