

Rhamnose

Other names:	L-Mannose, 6-deoxy- Isodulcit Isodulcitol L(+)-Rhamnose L-Mannomethylose L-Rhamnopyranose L-Rhamnose Locaose Mannose, 6-deoxy-, L- Rhamnopyranose, L- Rhamnose, L- 6-Deoxy-L-mannose 6-Deoxymannose, (L)- NSC 2056 L-(+)-Rhamnopyranose
Inchi:	InChI=1S/C6H12O5/c1-2-3(7)4(8)5(9)6(10)11-2/h2-10H,1H3
InchiKey:	SHZGCJCMOBCMKK-UHFFFAOYSA-N
Formula:	C6H12O5
SMILES:	CC1OC(O)C(O)C(O)C1O
Mol. weight [g/mol]:	164.16
CAS:	3615-41-6

Physical Properties

Property code	Value	Unit	Source
gf	-640.15	kJ/mol	Joback Method
hf	-935.13	kJ/mol	Joback Method
hfus	31.75	kJ/mol	Joback Method
hvap	99.37	kJ/mol	Joback Method
log10ws	0.58		Crippen Method
logp	-2.194		Crippen Method
mvol	113.890	ml/mol	McGowan Method
pc	5390.71	kPa	Joback Method
tb	733.22	K	Joback Method
tc	909.07	K	Joback Method
tf	417.65	K	Joback Method
vc	0.398	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	374.21	J/molxK	733.22	Joback Method
cpg	412.81	J/molxK	879.76	Joback Method
cpg	406.12	J/molxK	850.45	Joback Method
cpg	398.92	J/molxK	821.14	Joback Method
cpg	391.19	J/molxK	791.84	Joback Method
cpg	382.96	J/molxK	762.53	Joback Method
cpg	418.98	J/molxK	909.07	Joback Method
dvisc	0.0000022	Paxs	733.22	Joback Method
dvisc	0.0000046	Paxs	680.62	Joback Method
dvisc	0.0000110	Paxs	628.03	Joback Method
dvisc	0.0000310	Paxs	575.43	Joback Method
dvisc	0.0001073	Paxs	522.84	Joback Method
dvisc	0.0004917	Paxs	470.25	Joback Method
dvisc	0.0033046	Paxs	417.65	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C3615416&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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

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