

«alpha»-Lactose monohydrate

Other names:	.alpha.-D-Glucopyranose, 4-O-.beta.-D-galactopyranosyl-, monohydrate «alpha»-Lactose monohydrate
Inchi:	InChI=1S/C12H22O11.H2O/c13-1-3-5(15)6(16)9(19)12(22-3)23-10-4(2-14)21-11(20)8(18)
InchiKey:	WSVLPVUVIUVVCRA-UHFFFAOYSA-N
Formula:	C12H22O11.H2O
SMILES:	O.OCC1OC(OC2C(CO)OC(O)C(O)C2O)C(O)C(O)C1O
Mol. weight [g/mol]:	360.31
CAS:	10639-26-6

Physical Properties

Property code	Value	Unit	Source
chs	-5667.90 ± 0.96	kJ/mol	NIST Webbook
chs	-5631.60	kJ/mol	NIST Webbook
hfs	-2484.10 ± 1.10	kJ/mol	NIST Webbook
log10ws	0.14		Cheméo Relay (1.0)
tf	439.88	K	Cheméo Relay (1.0)

Sources

Cheméo Relay (1.0, beta):

NIST Webbook:

<http://webbook.nist.gov/cgi/cbook.cgi?ID=C10639266&Units=SI>

Cheméo Relay (1.0):

Legend

chs:	Standard solid enthalpy of combustion
hfs:	Solid phase enthalpy of formation at standard conditions
log10ws:	Log10 of Water solubility in mol/l
tf:	Normal melting (fusion) point

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<https://www.chemeo.com/cid/16-034-6/alpha-Lactose-monohydrate.pdf>

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