D-Glucose, 4-O-«alpha»-D-glucopyranosyl-, hydrate (1:1)

Other names: Maltose Monohydrate
«beta»-Maltose 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: WSVLPVUVIUVCRA-GUTYATFHSA-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: 6363-53-7

Physical Properties

Property code	Value	Unit	Source
chs	-5692.33 ± 0.54	kJ/mol	NIST Webbook
chs	-5690.40	kJ/mol	NIST Webbook
hfs	-2459.60 ± 0.71	kJ/mol	NIST Webbook
ss	417.60	J/mol×K	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cps	450.70	J/mol×K	296.27	NIST Webbook

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C6363537&Units=SI

Legend

chs: Standard solid enthalpy of combustion

cps:	Solid phase heat capacity
hfs:	Solid phase enthalpy of formation at standard conditions
ss:	Solid phase molar entropy at standard conditions