



Database name: SGTE Molten Salts Database
Database acronym: SALT1
Database owner: Scientific Group Thermodata Europe
Database segment: Corrosion and Salts

Database version: 1.2

Brief description

SALT1 is suitable for molten salts calculations.

Applications

Hot salt corrosion of alloys, high energy lamp design and more.

Included Elements

Br C Ca Cl Cr Cs F H I K Li Mg Na O Rb S Zn

Included Phases

CACL2	KCL_CACL2	LICL_CS2CL2	MGCL2	NAOH_ORTHO
CSCL	KCL_ZN2CL4	LICL_CSCL	MONOCLINIC	ORTHORHOMBIC
HALITE	LI2CO3_A	LICL_RBCL	NA2CO3	ZNCL2
IONIC_LIQUID:Y	LI2CO3_B	LIF_CSF	NA2O2H2_NA2CRO4	
K2CL2_ZNCL2	LI2CO3_C	LIF_RBF	NA2SO4	
K2SO4_ALPHA	LIBR_CSBR	LIL_RBI	NA4O4H4_NA2CRO4	
K3CL3_ZN2CL4	LIBR_RBBR	LIKCO3	NAOH_NA2SO4	

Assessed Systems

Assessed binary salt systems:

KBr-KCl, KBr-KF, KBr-KI, KCl-KF, KCl-KI, KF-KI, CsBr-CsCl, CsBr-CsF, CsBr-CsI, CsCl-CsF, CsCl-CsI, CsF-CsI, LiBr-LiCl, LiBr-LiF, LiBr-LiI, LiCl-LiF, LiCl-LiI, LiF-LiI, NaBr-NaCl, NaBr-NaF, NaBr-NaI, NaCl-NaF, NaCl-NaI, NaF-NaI, RbBr-RbCl, RbBr-RbF, RbBr-RbI, RbCl-RbF, RbCl-RbI, RbF-RbI,

CsBr-KBr, CsBr-LiBr, CsBr-NaBr, CsBr-RbBr, KBr-LiBr, KBr-NaBr, KBr-RbBr, LiBr-NaBr, LiBr-RbBr, NaBr-RbBr,

CsCl-KCl, CsCl-LiCl, CsCl-NaCl, CsCl-RbCl, KCl-LiCl, KCl-NaCl, KCl-RbCl, LiCl-NaCl, LiCl-RbCl, NaCl-RbCl,

CsF-KF, CsF-LiF, CsF-NaF, CsF-RbF, KF-LiF, KF-NaF, KF-RbF, LiF-NaF, LiF-RbF, NaF-RbF,

CsI-KI, CsI-LiI, CsI-NaI, CsI-RbI, KI-LiI, KI-NaI, KI-RbI, LiI-NaI, LiI-RbI, NaI-RbI,

K2CO3-LiCO3, K2CO3-Na2CO3, Li2CO3-Na2CO3, NaCl-Na2SO4, KCl-K2SO4, CaCl2-KCl, KCl-ZnCl2, CaCl2-ZnCl2, Na2CrO4-NaOH, NaCl-NaOH, NaCl-Na2CrO4, Na2CrO4-Na2SO4, NaOH-Na2SO4

Limits

Combinations of several critically-assessed systems can calculate and extrapolate higher-order multicomponent systems. Such extrapolations require experience and understanding and the producer or vendor should be contacted if problems occur. Critical calculations must always be verified by equilibrium experimental data; it is the user's responsibility to verify the calculations but Thermo-Calc Software is interested to know about any significant deviations in order to improve any future release.

Scientific Models & References

See the Thermo-Calc Software reference list available at:

http://www.thermocalc.com/DOWNLOAD_AREA/References.html