

SALT1: SGTE Molten Salts Database

Database name: SGTE Molten Salts Database *Database acronym:* SALT

Database owner: Scientific Group Thermodata Europe *Database version:* 1.3

SALT1 is suitable for molten salts calculations and can be used in applications such as hot salt corrosion of alloys, high energy lamp design and more.

Included Elements (17)

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
C_SCL	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	LII_RBI	NA4O4H4_NA2CRO4	
K3CL3_ZN2CL4	LIBR_RBBR	LIKCO3	NAOH_NA2SO4	

Assessed Binary 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

As in the spirit of the CALPHAD method, predictions can be made for multicomponent systems by extrapolation into multicomponent space of data critically evaluated and assessed based on binary, ternary and in some cases higher order systems. However, critical calculations must always be verified by equilibrium experimental data; it is the user's responsibility to verify the calculations but Thermo-Calc Software AB is interested to know about any significant deviations in order to improve any future release.

Scientific Models and References

See the Thermo-Calc Software reference list and reference library at: <https://www.thermocalc.com/support/resources/>