

Tabel S1. Literature review of phase change temperature and enthalpy of various salt mixtures for heat storage applications, based on [1, 2, 3]

PCM composition (% mol)	T _m , °C	ΔH _m , J/g
LiF(16.2)-42.0LiCl-17.4LiVO ₃ -11.6Li ₂ SO ₄ -11.6Li ₂ MoO ₄	363	284 ± 7
LiF(16.2)-51.5LiCl-16.2Li ₂ SO ₄ -16.2Li ₂ MoO ₄	402	291
*LiF(17.6-17.7)-(33.2-33.8)KF-(40.0-40.4)KCO ₄ -(8.6-8.6)KCl	422-426	407-412
LiF(20)-80LiOH	427	1163
LiF(25.0)-43.8LiVO ₃ -14.8Li ₂ SO ₄ -16.5Li ₂ MoO ₄	428	260
LiF(80)-20LiOH	430	528
LiF(45.7)-1.8BaF ₂ -41.2KF-11.3NaF	438	332
LiF(42.5-45.5)-(41-43)KF-(10.7-11.5)NaF-(2.8-3.0)KCl	440-448	682-692
*LiF(27.1)-11.9NaF-55.1KF-5.9MgF ₂	449	699
*LiF(29.2)-11.7NaF-59.1KF	454	414
LiF(46.5)-42KF-11.5-NaF	454	325
*LiF(29)-12NaF-59KF	463	442
LiF(73.6)-26.4LiCl	485	403
KF(50)-50LiCl	487	344
* LiF(33)-67KF	493	458
LiF(18.0)-53.0LiVO ₃ -29.0Li ₂ MoO ₄	493	297
*LiCl(47.4-47.7)-(46.8-47.0)KCl-(3.2-3.4)LiCO ₃ -(2.1-2.4)LiF	340-343	375-380
LiCl(58)-42KCl	348	170
KCl(28.7)-45MnCl ₂ -26.3NaCl	350	215
KCl(45.5)-34.5MnCl ₂ -20NaCl	390	230
*LiCl(23.4-24.2)-(24.8-25.3)LiVO ₃ -(27.1-27.6)Li ₂ MoO ₄ -(17.3-17.8)Li ₂ SO ₄ -(6.1-6.2)LiF	360-363	278-284
*NaCl(22.5-26.5)-(18.5-22.5)KCl-(57.0-53.0) MgCl ₂	385-393	405-410
KCl(21.6)-45.4MgCl ₂ -33.0NaCl	384	284
KCl(20)-50MgCl ₂ -30NaCl	396	291
KCl(22)-51MgCl ₂ -27NaCl	396	290
KCl(37.7)-37.3MnCl ₂ -25NaCl	400	235
NaCl(56)-44MgCl ₂	430	320
*KCl(54)-46ZnCl ₂	432	218
*KCl(61)-39MgCl ₂	435	351
NaCl(56.2)-43.8MgCl ₂	442	325
LiCl(58.5)-23.6Li ₂ SO ₄ -17.9Li ₂ MoO ₄	445	327
KCl(36)-64MnCl ₂	448	236
LiCl(49.0)-12.75Li ₂ SO ₄ -38.25LiVO ₃	449	450
KCl(35)-65MnCl ₂	450	237

NaCl(60)–40MgCl ₂	450	328
*NaCl(48)–52MgCl ₂	450	430
CaCl ₂ (47.6)–8.1KCl–41.3NaCl–2.9NaF	460	231
CaCl ₂ (41.6)–2.2KCl–8.8MgCl ₂ –47.4NaCl	460	245
CaCl ₂ (50)–7.25KCl–42.75NaCl	465	245
* KCl(36)–64MgCl ₂	470	388
LiCl(69.5)–26.5LiF–4MgF ₂	484	157
CaCl ₂ (50)–1.5CaF ₂ –48.5NaF	490	264
CaCl ₂ (52.3–55)–(45–47.2) NaCl	490-500	233-239
CaCl ₂ (52.8)–47.2NaCl	500	239
NaOH(77.2)–16.2NaCl–6.6Na ₂ CO ₃	318	290
LiOH(80)–20LiF	427	1163
Li ₂ CO ₃ (32.1)–34.5K ₂ CO ₃ –33.4Na ₂ CO ₃	397	276
Li ₂ CO ₃ (47)–53K ₂ CO ₃	488-491	321-342
Li ₂ CO ₃ (44)–56Na ₂ CO ₃	496-498	370-393
Li ₂ CO ₃ (28)–72K ₂ CO ₃	498	263

* (m/m) composition

[1] Judith C. Gomez, *High-Temperature Phase Change Materials (PCM) Candidates for Thermal Energy Storage (TES) Applications*, Milestone Report NREL/TP-5500-51446, September 2011, Contract No. DE-AC36-08GO28308

[2] Judith Gomez, Greg C. Glatzmaier, Anne Starace, Craig Turchi, and Jesus Ortega, *High Temperature Phase Change Materials for Thermal Energy Storage Applications*, NREL/CP-5500-52390 August 2011, Contract No. DE-AC36-08GO28308, materiał prezentowano na konferencji: *SolarPACES 2011 Granada, Spain September 20-23, 2011*

[3] Zalba B., Marin J., Cabeza L.F., Mehling H., *Review on thermal energy storage with phase change: materials, heat transfer analysis and applications*, Applied Thermal Engineering 23 (2003) 251–283