Salt: Li

* Melting point: 453 K
* Density: 0.48
* Li Density: 0.48
* Thermal conductivity at melting point: 0.772 for solid and 0.428 for liquid

Salt: LiPb

* Melting point: 508 K
* Density: 8.98
* Li Density: 0.062
* Thermal conductivity at melting point: 32.49 for solid and 12 for a liquid
* Pb-Li, Li₆₀Pb₄₀ or Li₁₇Pb₈₃
  + Material properties differ slightly but are like this overall.
  + Pb is used partially because it has low absorption and high neutron multiplication. It also has advantages of doing well in both neutronic and activation tests.

Salt: FLiBe

* Melting point: 732 K
* Density: 2.0
* Li Density: 0.28
* Thermal conductivity at melting point: 1.1 around the melting point.
* Li₂BeF₄

Heats and densities given by: <https://www.sciencedirect.com/science/article/pii/S0920379698002026>

Flibe has been chosen because it is compatible with stainless steel up to 650°C [[35]](https://www.sciencedirect.com/science/article/pii/S0920379698002026" \l "BIB35). Li and Li17Pb83 would also work but must be 1.5 m thick versus 0.5 m to attenuate neutrons.

<https://www.sciencedirect.com/science/article/pii/S0920379698002026>

Thermal conductivity of FLiBe:  
<https://www.mdpi.com/2673-7264/2/3/10#fromHistory>

Thermal conductivity of LiPb:

<https://qedfusion.org/LIB/PROPS/PANOS/lipb.html#fromHistory>

Test model dimensions:

‘Infinite’ sphere:

* Inner radius: 0.1 m
* Outer radius: 1000 m
* Void outside boundary condition

Finite sphere:

* Inner radius: 0.1 m
* Outer radius: 1 m
* Void outside boundary condition

Finite sphere with shielding:

* Inner radius: 0.1 m
* Outer salt radius: 1.0 m
* Outer shielding radius: 1.1 m
* Reflective outside boundary condition