Leading Tone 7th Chord

Quality:
In major it is half diminished (m3, m3, M3) and is asymmetrical.
In minor it is fully diminished (m3, m3, m3) and is symmetrical.

Because this chord is symmetrical, its root cannot be determined until it resolves. The fully dim chord is therefore potentially very ambiguous. The chord and all its inversion have the same sound. This chord has its origins in the V6/5 and even though it is only 1 note different from the V6/5 it is much greater in intensity.

Figured bass:
Same as the figured bass for inversions of the V7.

Function:
Functions like a dominant.

Doubling:
Complete chord. No omissions, no doublings.

Progression:
Every note of the viiº7 chord resolves stepwise. There are no common tones.

The vii half dim. progresses to I or V.
   a) root position may resolve to I or V. Watch out for P5ths!!
   b) 1st inversion resolves to I6. (resolution to I results in P5ths).
   c) 2nd inversion may resolve to I or I6.

The vii fully dim. progresses to I or may dissolve to V. It contains 2 tritones which when resolved correctly results in a doubled 3rd in the i chord. The dim5th resolves inward, the aug. 4th resolves outward. Scale degree 2 then therefore often moves to 1 instead of 3. If unequal 5ths occur they are acceptable. 2 is often above b6 to avoid the unequal 5ths.
   a) root position may resolve to I or V.
   b) 1st inversion resolves to I6.
   c) 2nd inversion may resolve to I or I6.
   d) 3rd inversion progresses to V7 or [i6/4]-V7