Review of revised version of
On the Thermodynamic and Dynamic Aspects of Immersion Ice Nucleation
by D. Barahona

General comment:
The manuscript has improved a lot and my concerns were mostly addressed in an adequate way. However, there are still some issue, which have to be clarified before this manuscript can be accepted for publication.

Minor points:

1. The mathematical reformulation of the theory is still hard to follow; at least I had to rewrite the equations and to make the manipulations by myself before I could get through it. Maybe it would be worth to add some more intermediate steps in the derivation. For instance, the step from eq. (34) to eq. (35) took me a while. Maybe some additional derivations could be given in an appendix.

2. I have still concerns with the interpretation of equations (31) and (33). While in general (31) is fine with me, the interpretation of eq. (31) for the case $\zeta \to 1$ is not straightforward. It is clear that $\Lambda_{\mathrm{mix}} = 0$ for $\zeta \to 1$,; however, one have to check, if the quotient $-\frac{\Lambda_{\mathrm{mix}}}{\zeta - 1}$ behave adequately for $\zeta \to 1$, such that the equation is really converging to the mentioned values of $a_{\mathrm{w},*}$, especially to $a_{\mathrm{w,eff}} = 1$. I suggest that this should be checked in details, since the limit is used later.

Technical comments
The reference Kärcher (2003) is published in Atmos. Chem. Phys.