The long-time behaviour of a triply convective diffusive fluid mixture saturating a porous horizontal layer in the Darcy-Oberbeck-Boussinesq scheme, is investigated.

i) It is shown that the L2-solutions are bounded, uniquely determined by the data and asymptotically converging toward an absorbing set;

ii) the stability analysis of the conduction solution is performed;

iii) the linear stability is reduced to the stability of ternary systems of O.D.E. and hence to algebraic inequalities;

iv) the existence of an instability area between stability areas of the thermal Rayleigh number (instability island), is found analytically when the layer is heathed and salted (at least by one salt) from below;

v) the validity of the linearization principle and the global non-linear asymptotic stability of the conduction solution - when all three effects are either destabilizing or stabilizing - are obtained via a symmetrization.