



Corrigendum

Corrigendum to “Low-cost temperature transition mixtures (TTM) based on ethylene glycol/potassium hydroxide as reversible CO₂ sorbents” [J. Mol. Liquids 340 (2021) 117180]



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In this corrigendum, we report a correction on the calculated values of activation energies both of viscosity (E_{η}) and of ionic conductivity (E_{σ}) reported in the paper: Journal of Molecular Liquids 340 (2021) 117180.

In the paper “Low-cost temperature transition mixtures (TTM) based on ethylene glycol/potassium hydroxide as reversible CO₂ sorbents” (<https://doi.org/10.1016/j.molliq.2021.117180>) we measured viscosity, density and conductivity for two systems based on ethylene glycol (EG), potassium hydroxide and boric acid (BA).

The experimental values and the Walden plots have been checked and resulted reproducible, but unfortunately, we found a mis-calculation on the values of E_{η} and E_{σ} . In this article we report the correct values (Table 1).

The values reported in the paper Journal of Molecular Liquids 340 (2021) 117180 are lower, these are correct and coherent with literature data on similar structured liquids [1].

The considerations made in the discussion of the paper are still valid as the values are lower to the ones reported for similar liquids and similar to other low-viscous systems [2], therefore mainly determining the physical absorption phenomena of CO₂ in these liquids, as stated in the main paper.

The authors would like to apologise for any inconvenience caused.

References

- [1] F. Cardellini, M. Tiecco, R. Germani, G. Cardinali, L. Corte, L. Roscini, N. Spreti, Novel zwitterionic deep eutectic solvents from trimethylglycine and carboxylic acids: Characterization of their properties and their toxicity, RSC Adv. 4 (2014) 55990–56002, <https://doi.org/10.1039/C4RA10628H>.
- [2] R. Germani, M. Orlandini, M. Tiecco, T. Del Giacco, Novel low viscous, green and amphiphilic N-oxides/phenylacetic acid based Deep Eutectic Solvents, J. Mol. Liq. 240 (2017) 233–239, <https://doi.org/10.1016/j.molliq.2017.05.084>.

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Table 1

Viscosity Activation Energies (E_η , kJ/mol) and Ionic Conductivity Activation Energies (E_σ , kJ/mol) for System A (EG/KOH 3:1) and System B (EG/KOH/BA 3:1:1) liquids.

	Viscosity Activation Energy E_η (kJ/mol)	Ionic Conductivity Activation Energy E_σ (kJ/mol)
System A (EG/KOH 3:1)	43.20	26.30
System B (EG/KOH/ BA 3:1:1)	36.86	20.39