

Pre-Lab Assignment for Experiment 2

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Given the values for Polyethylene and Polystyrene, a reasonable value for a plastic would probably be somewhere in the low to mid 2-3 range; that is, probably somewhere between $2 - 2.65$. The dielectric permittivity defines a material's ability to store charge. This means that, given an electric field, the field would be able to permeate some amount of the material, which would store some of that charge. This would mean the charge becomes polarized, which means it aligns with the field.