• Describe how the addition of an electrolyte can alter the state of a colloidal dispersion.

If the colloidal particle has a charge, a layer of oppositely charged ions will form on the surface (the Stern layer). In the region around the outside of the colloid, there is therefore a build-up of counter ions creating a double charge layer. The charge surrounding one colloid will repel the charge surrounding other particles and so coagulation is prevented.

Addition of an electrolyte leads to reduction in the net charge surrounding each colloid and prevents this electrostatic stabilization. As a result, the colloid particles tend to coagulate and the colloidal dispersion is lost.

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