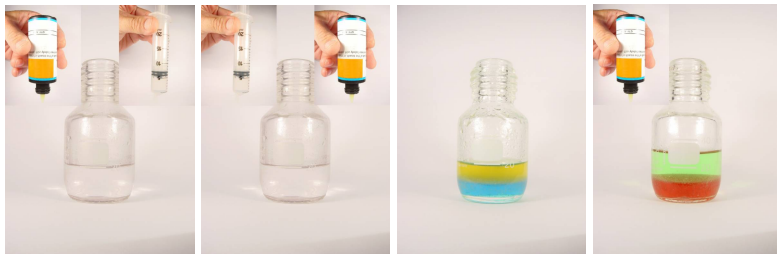# POLYACRYLATE AND TOTAL POLYMER

2 - 10ppm (Two-Phase Titration)

Take a **20ml sample.** Add **20 drops of A1.** Add exactly **1ml of A2.** Allow to stand for **10 minutes.†**	Filter the sample. Add approximately **2ml of A3** and **20 drops of A4‡**	Stopper and shake vigorously for **10 seconds**. and allow the phases to separate.•	Add drops of **A5 or A6 ••** until **grey / pink.** Count number of drops.

* The sample should be filtered to remove suspended solids if not clear.

†During the development period, fit a 0.45µm pore size membrane filter to the filter holder, or use an encapsulated membrane filter of the same porosity. (Please not the filtration module is in option and not included in the kit)
Remove the piston from the syringe and fit the filter assembly to the syringe body.
Pour the contents of the test jar into the syringe body and rinse the test jar with water (distilled or tap).
Refit the syringe piston and slowly pass the sample through the membrane filter collecting the filtrate in the test jar.

‡ The reagent A3 will form a separate layer at the bottom of the jar.

• The A3 layer will turn blue if polymer is present.

•• Add Polyacrylate Reagent A5 or A6 (depending upon which reagent was used to produce the calibration tables) a couple of drops at a time. Stopper the bottle and shake vigorously for 10 seconds between each addition and wait for phase separation. Towards the end point the two phases will separate more rapidly. At this stage reduce the addition to one drop at a time.

- The test is a back titration and hence the greater the polymer content, the less the titration will be. No polymer present will give a titration of 20 drops A5 or 40 drops A6.
- If the result obtained is fewer than 10 drops of A5 or 20 drops of A6, the test must be repeated on 20ml of diluted sample. **THE TOTAL VOLUME OF SAMPLE USED IN THE TEST MUST ALWAYS BE 20ml**. The result obtained should then be multiplied by the dilution factor.

Polyacrylate/ Total Polymer (in mg/l of product) = Number of drops A5 or A6 used x Factor
Factor to be calculated by running the tests on your product standards