

**Polyacrylate****56I700330****0 - 20 mg/L PAA****Material**

<b>Reagents</b>	<b>Packaging Unit</b>	<b>Part Number</b>
Polyacrylate Buffer A1	65 mL	56L025565
Polyacrylate Precipitant A2	65 mL	56L025665
Polyacrylate Solvent A3	30 mL	56L003430
Polyacrylate Indicator A4	65 mL	56L018165
Polyacrylate HR Titrant A5	65 mL	56L018565
Polyacrylate LR Titrant A6	65 mL	56L019065

The following accessories are required.

<b>Accessories</b>	<b>Packaging Unit</b>	<b>Part Number</b>
Syringe, plastic, 20 mL	1 Pieces	56A006501
Titration jar, glas, 50 mL	1 Pieces	56A008101
Filter Circle 0.45 µm, 25 mm	1 Pieces	56A020050
Filter Holder 25 mm	1 Pieces	56A009101

**Application List**

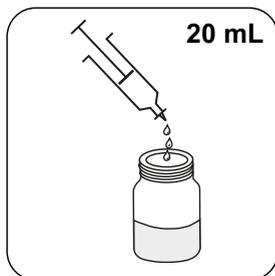
- Cooling Water

**Preparation**

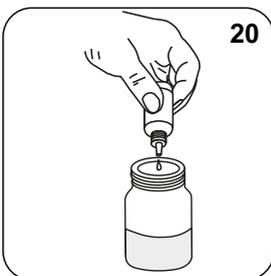
1. The sample should be filtered to remove suspended solids if not crystal clear.
2. During the reaction time, fit a 0.45 µm pore size membrane filter to the filter holder. Remove the piston from the syringe and fit the filter assembly to the syringe body. Pour the contents of the test jar into the syringe body, and rinse the test jar with tap water. Refit the syringe piston and slowly pass the sample through the membrane filter collecting the filtrate in the test jar.
3. Towards the end point the two phases will separate more rapidly. At this stage reduce the addition to one drop at a time.
4. If the result obtained is less than 10 drops, the test must be repeated on a 20 mL volume of diluted sample. THE TOTAL VOLUME OF SAMPLE USED IN THE TEST MUST ALWAYS BE 20 mL. The result obtained should then be multiplied by the dilution factor.

## Remarks

1. Colours may vary depending on sample and test conditions.
2. The test is a back titration and hence the greater the polymer content, the less the titration will be.
3. The test should be performed of know standards of products of interest to determine the product factor (F) and the constant. Factor (F) will be a negative number.
4. Polyacrylate Solvent A3 is only compatible with glassware. Do not allow reagent to come into contact with plastic.



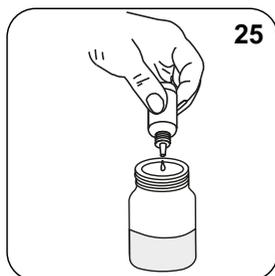
Fill the jar with **20 mL** of the sample.



Add **20 drops Polyacrylate Buffer A1**.



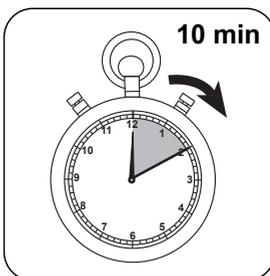
Swirl to mix.



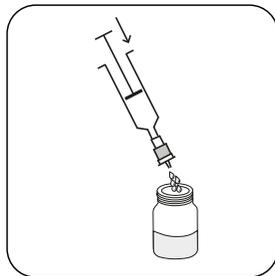
Add **25 drops Polyacrylate Precipitant A2**.



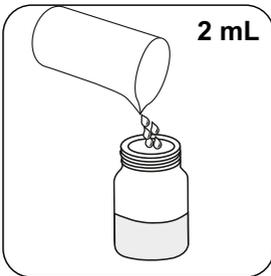
Swirl to mix.



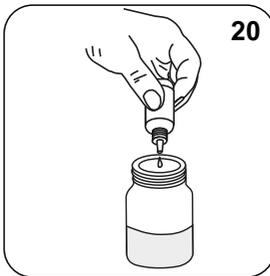
Wait for **10 minute(s)** reaction time.



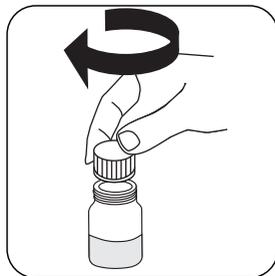
Filter sample with a filter (pore size 0.45  $\mu$ m).



Add **2 mL Polyacrylate Solvent A3**.



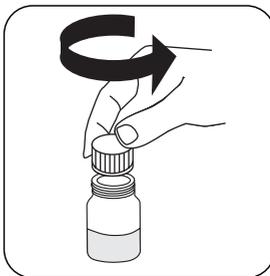
Add **20 drops Polyacrylate Indicator A4**.



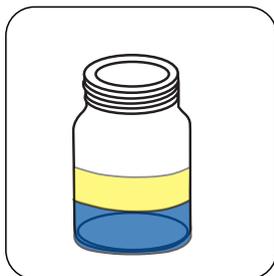
Close jar.



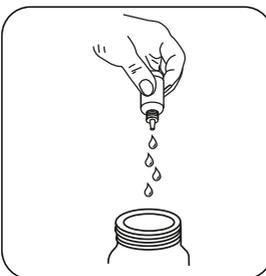
Mix the contents by shaking vigorously. (20 s).



Open the jar.

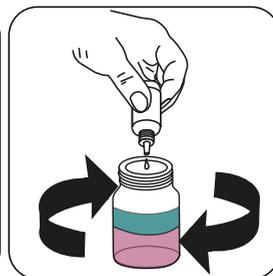


Allow phases to separate. A blue color should develop in the lower layer if any product is present.



**Attention!** Record the number of drops that will be added.

**Note:** Make sure to shake the jar after adding each drop!



Add **Polyacrylate HR Titrant A5** or **Polyacrylate HR Titrant A6** drop by drop to the sample until colouration turns from **blue** to **grey/ pink** in the bottom layer .

**Calculate test result: Polyacrylate mg/L = Number of drops x F + constant (see notes)**