

## Direct Measurement<sup>1</sup>

## Method 8165

**Scope and application:** For sewage and wastewater.

<sup>1</sup> Adapted from *Standard Methods for the Examination of Water and Wastewater*, Section 2540E.



### Test preparation

### Before starting

Make sure that the sample is fully mixed before analysis.

Keep samples refrigerated until the time of analysis to keep to a minimum the microbiological decomposition of solids.

### Items to collect

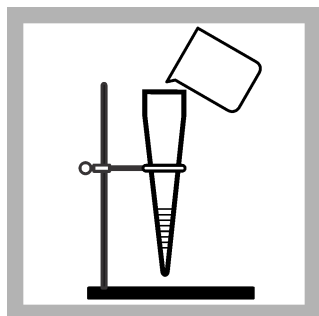
Description	Quantity
Imhoff cone	2
Imhoff cone brush	1
Imhoff cone support	1

Refer to [Consumables and replacement items](#) on page 2 for order information.

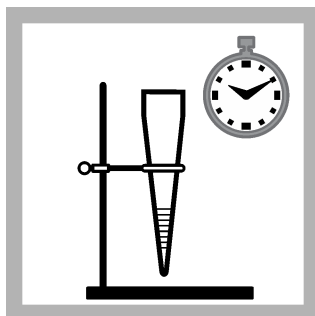
### Sample collection and storage

- Collect samples in clean glass or plastic bottles.
- To preserve samples for later analysis, keep the samples at or below 6 °C (43 °F) for up to 24 hours.
- Let the sample temperature increase to room temperature before analysis.

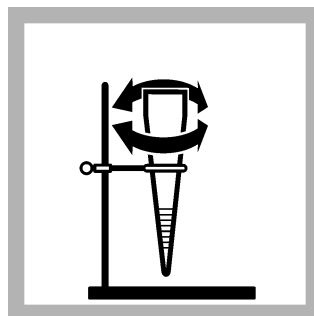
### Test procedure



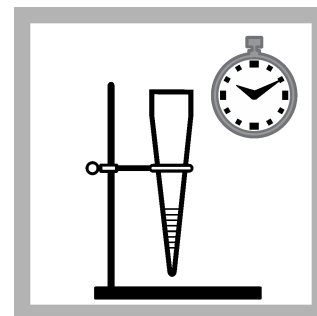
1. Fill an Imhoff cone to the 1-L mark with a mixed sample.



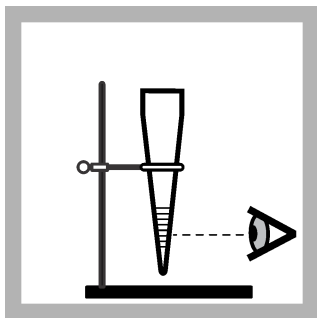
2. Do not move for 45 minutes to let the sample become stable.



3. Turn the cone forward and back to remove materials on the sloped side of the cone.



4. Do not move for 15 minutes to let the sample become stable.



5. Read the graduated scale on the Imhoff cone at the top of the solids layer as mL/L settleable matter.

## Summary of method

The quantity of settleable matter in sewage treatment plant influent and effluent gives an empirical estimate of the type and intensity of treatment required. The quantity of settleable matter also gives the general quality of the water being discharged.

## Consumables and replacement items

### Required apparatus

Description	Quantity/test	Unit	Item no.
Imhoff cone	2	each	206700
Imhoff cone brush	1	each	68800
Imhoff cone support	1	each	57200

### Optional apparatus

Description	Unit	Item no.
Beaker, glass, low form 2000 mL	each	50054
Gloves, chemical resistant, size 9–9.5	pair	2410104 <sup>1</sup>
Pitcher, graduated 2000 mL	each	2612854
Sampler, dipper 3–9 ft handle	each	2929501

<sup>1</sup> Other sizes available



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