

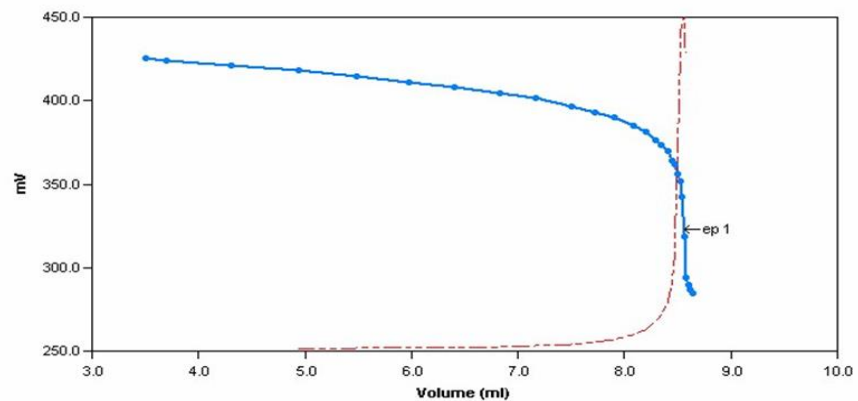
Method Abstract #73

Kappa Number Determination

Scope and Application This method determines the Kappa number of pulp/paper samples by determining the amount of lignin in the sample. This method is a modification of PAPTAC Standard Testing Methods Standard G.18 and conforms to TAPPI T236 om-99

Method Summary This method involves first blending a weighed, dried sample with DI water. Sulfuric acid, potassium permanganate and potassium iodide are then added to the sample. The sample is then titrated with sodium thiosulphate to an inflection endpoint. The kappa number is calculated and reported.

Sample Titration Curve



Method Performance

Parameter	Specification
Measuring Range	Kappa number 1 - 80
RSD @ Kappa number 3.1	0.793% or +/- 0.02
RSD @ Kappa number 16.2	0.299% or +/- 0.05
RSD @ Kappa number 40	0.262% or +/- 0.1
RSD @ High Range (Cardboard box sample with ~ Kappa Number 72)	3.003% or +/- 2.16