

DETERMINATION OF SURFACE TENSION

Name:

Group:

Date:

1. Goal of the experiment:

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A. THE STALAGMOMETER METHOD

Results of measurements of number of drops flowing out from stalagmometer capillary:

	water n_0	examined liquid, n
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
mean value		

temperature of liquids:

density of water:

$$d_0 \pm \Delta d_0 = \dots\dots\dots$$

mean number of drops:

$$\bar{n}_0 = \dots\dots\dots$$

density of the examined liquid:

$$d \pm \Delta d = \dots\dots\dots$$

$$\bar{n} = \dots\dots\dots$$

standard deviation of the mean:

$$s_{\bar{n}_0} = \dots\dots\dots$$

$$s_{\bar{n}} = \dots\dots\dots$$

maximum error of the mean value:

$$\Delta \bar{n}_0 = \dots\dots\dots$$

$$\Delta \bar{n} = \dots\dots\dots$$

$$\text{relative surface tension: } \frac{\sigma}{\sigma_0} \pm \Delta \left(\frac{\sigma}{\sigma_0} \right) = \dots\dots\dots$$

