

VZ07 | Kugelfall-Viskosimeter

22.11.22

~~Kleine Kugel: 15,11 mm~~

$m = 4,4531 \text{ g}$

Raumtemperatur 19°C

Neue Kugel: $d = (15,61 \pm 0,01) \text{ mm}$

$$\rho = \left(\frac{4}{3} \pi \left(\frac{d}{2} \right)^3 \right)^{-1} \cdot m \approx 2,2359 \cdot 10^{-3} \frac{\text{g}}{\text{mm}^3}$$

Fehler Stoppuhr:

Große Kugel: ~~15,28~~ $d = (15,7 \pm 0,1) \text{ mm}$

$m = 4,9528 \text{ g}$

$$\rho = 2,4073 \cdot 10^{-3} \frac{\text{g}}{\text{mm}^3}$$

Ende

①

kleine Kugel Messreihe (10 cm Fallstrecke)
(Zimmertemp.)

- | | |
|----------------------------------|------------------------------|
| 1.) oben: 12,21s | unten: 17,66s |
| 2.) oben: 12,40s | unten: 12,00s |
| 3.) " : 12,25s | " : 12,18s 12,32s |
| 4.) " : 12,10s 12,65s | " : 12,06s |
| 5.) " : 12,16s | " : 12,32s |
| 6.) " : 12,13s | " : 12,09s |
| 7.) " : 12,56s | " : 12,15s |
| 8.) " : 12,38s | " : 12,18s |
| 9.) " : 12,34s | " : 12,38s |
| 10.) " : 12,22s | " : 12 12,32s |

große Kugel Messreihe (5cm, Zimmertemperatur)

1.) oben:	34,78s	unten:	34,75s
2.) "	34,65s	"	34,94s
3.) "	35,00s	"	36,90s
4.) "	35,22s	"	35,63s
5.) "	35,47s	"	35,78s

gr. Kugel (5cm, erhöhte Temperaturen)

T	oben:	unten:
26°C	31,37s	31,22s
	30,66s	31,19s
27°C	30,43s	31,12s
	30,37s	30,63s
30°C	29,03s	29,78s
	28,82s	28,53s

weiter

nächste Seite

③

32°C

27,63s

27,96s

28,10s

28,10s

35°C

25,82s

25,81s

25,68s

26,16s

38°C

24,69s

24,81s

24,93s

24,97s

40°C

23,81s

23,78s

23,31s

23,09s

43°C

22,28s

22,37s

22, ~~18~~ 35s

22,15s

48°C

20,57s

21,00s

20,32s

20,78s

52°C

19,65s

19,09s

19,46s

19,16s

④

Pinon