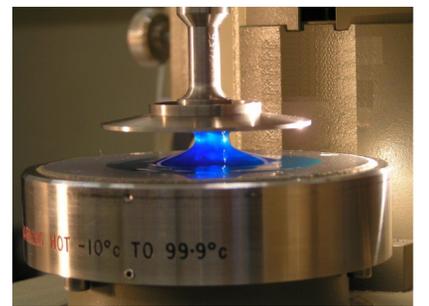


WEE-Knowledge

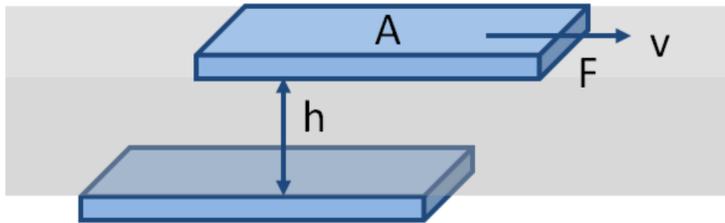
Rheologie



Rotationsversuche

Wichtige Formeln

2-Plattenmodell



A: Scherfläche [m²]
 F: Scherkraft [N]
 h: Plattenabstand [m]
 v: Fließgeschwindigkeit [m/s]

Schubspannung
 [N/m²=Pa]

$$\tau = \frac{F}{A}$$

Scherrate
 [1/s]

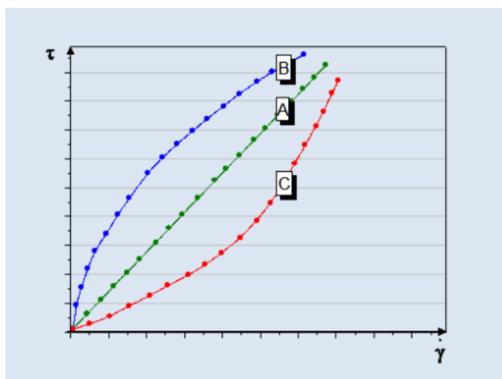
$$\dot{\gamma} = \frac{v}{h}$$

Dynamische Viskosität
 [Pa s]

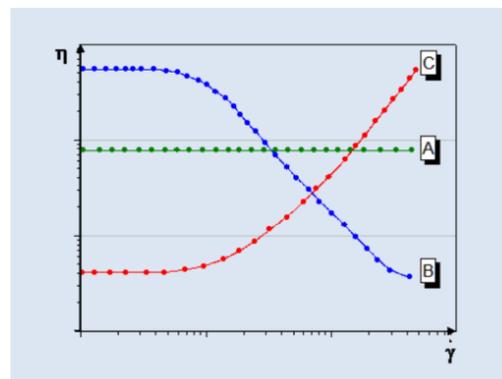
$$\eta = \frac{\tau}{\dot{\gamma}}$$

Wichtige Grafiken

Fließkurve

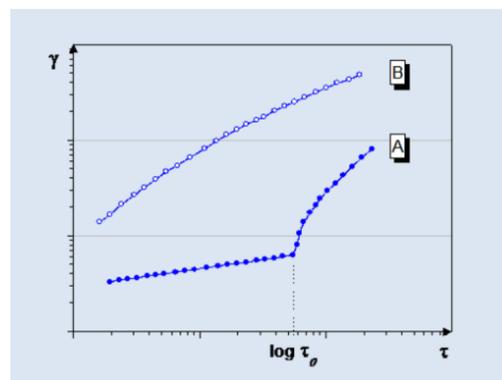
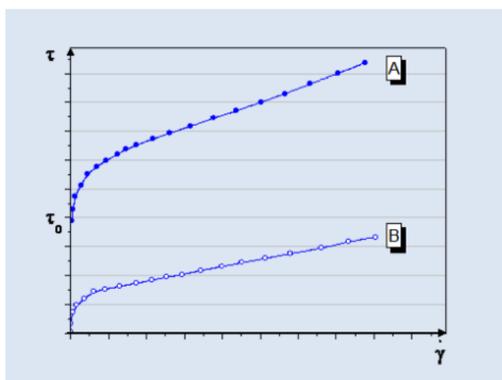


Viskositätskurve



a: idealviskos
 b: scherverdünnend
 c: scherverdickend

Fließgrenzen-Bestimmung



a: mit Fließgrenze
 b: ohne Fließgrenze