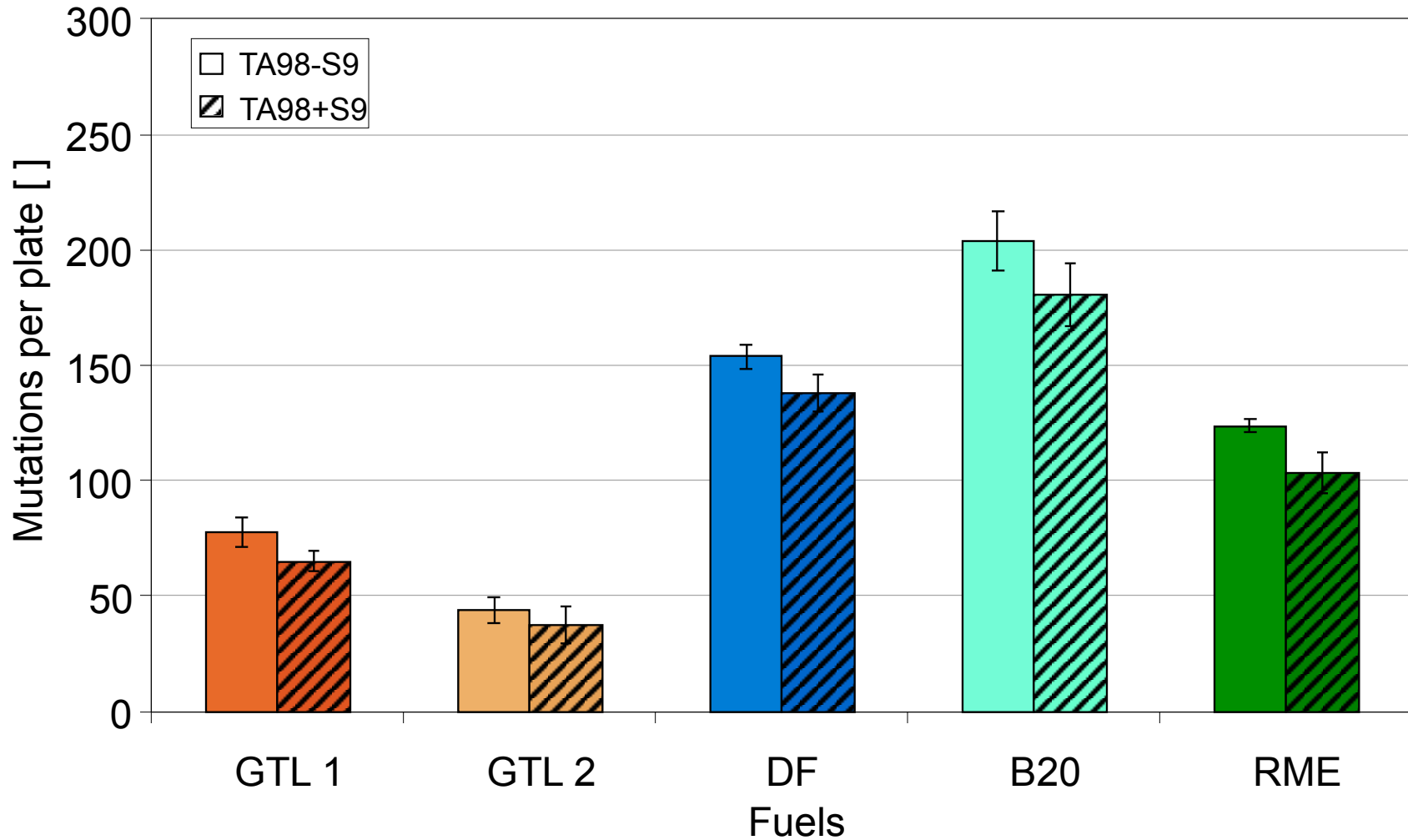


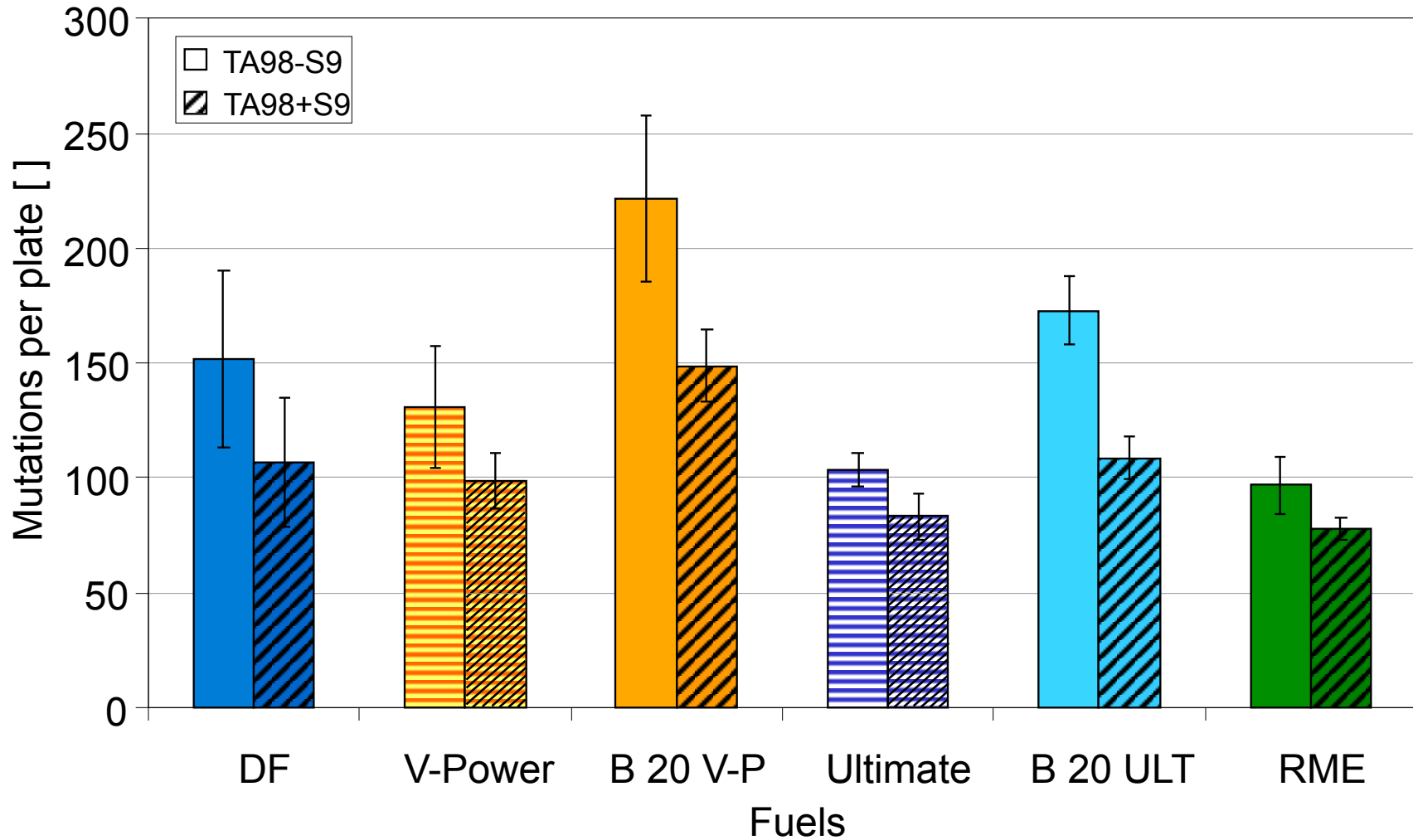
Einflüsse der Polarität auf Mischkraftstoffe

Jürgen Krahl

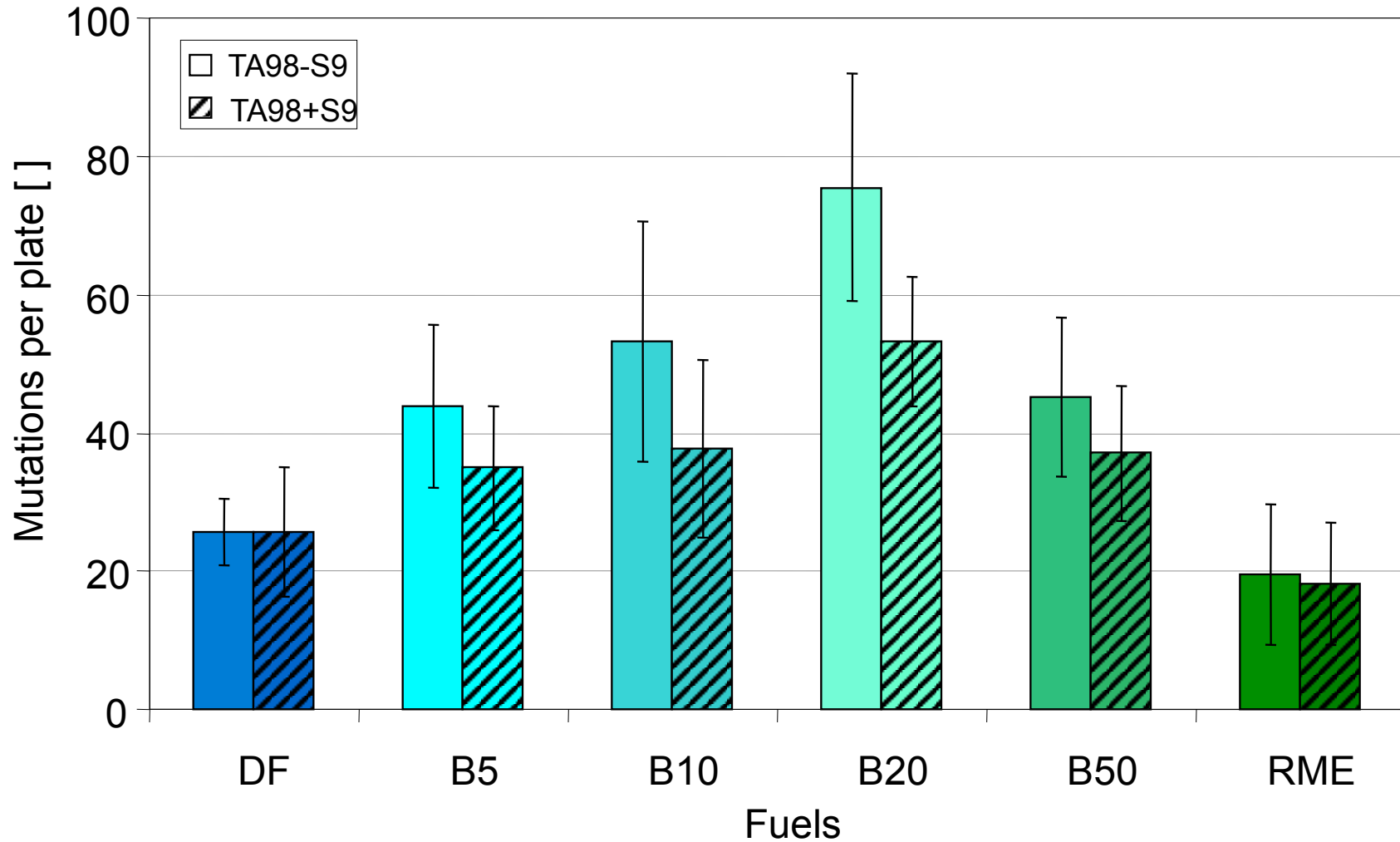
Mutagenität der Partikelphase im Ames- Test (OM 906, ESC)



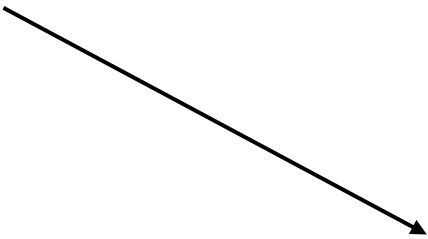
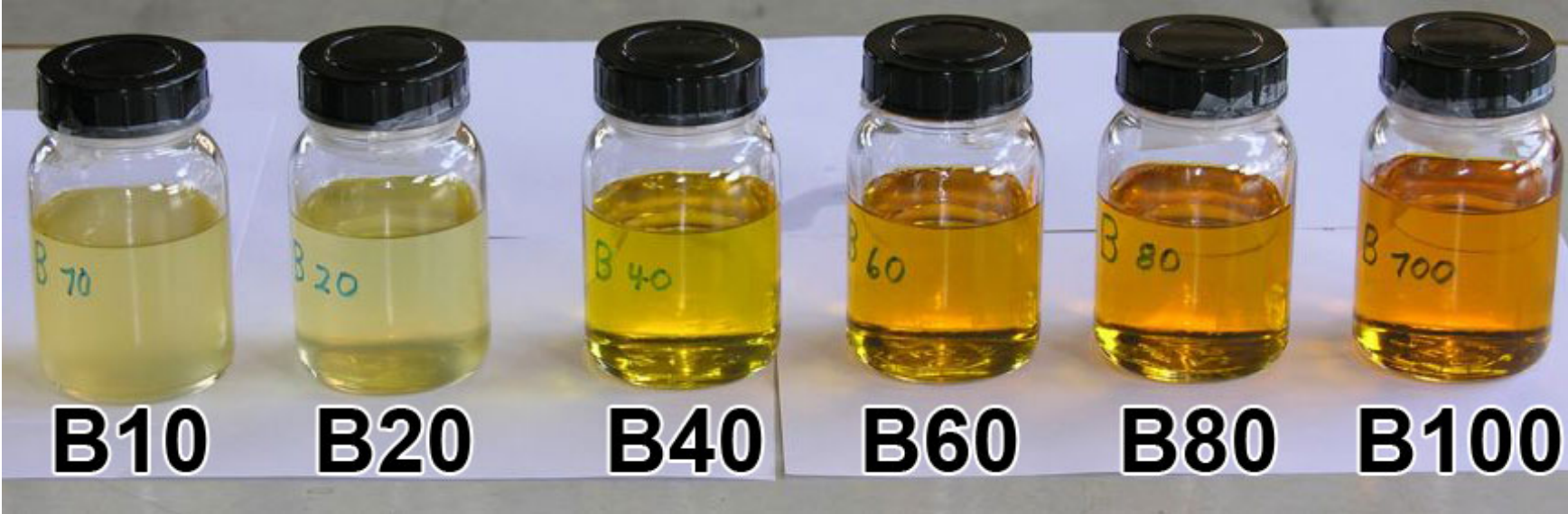
Mutagenität der Partikelphase im Ames- Test (OM 906, ESC)



Mutagenität der Partikelphase im Ames- Test (AVL 502.019, Volllast)

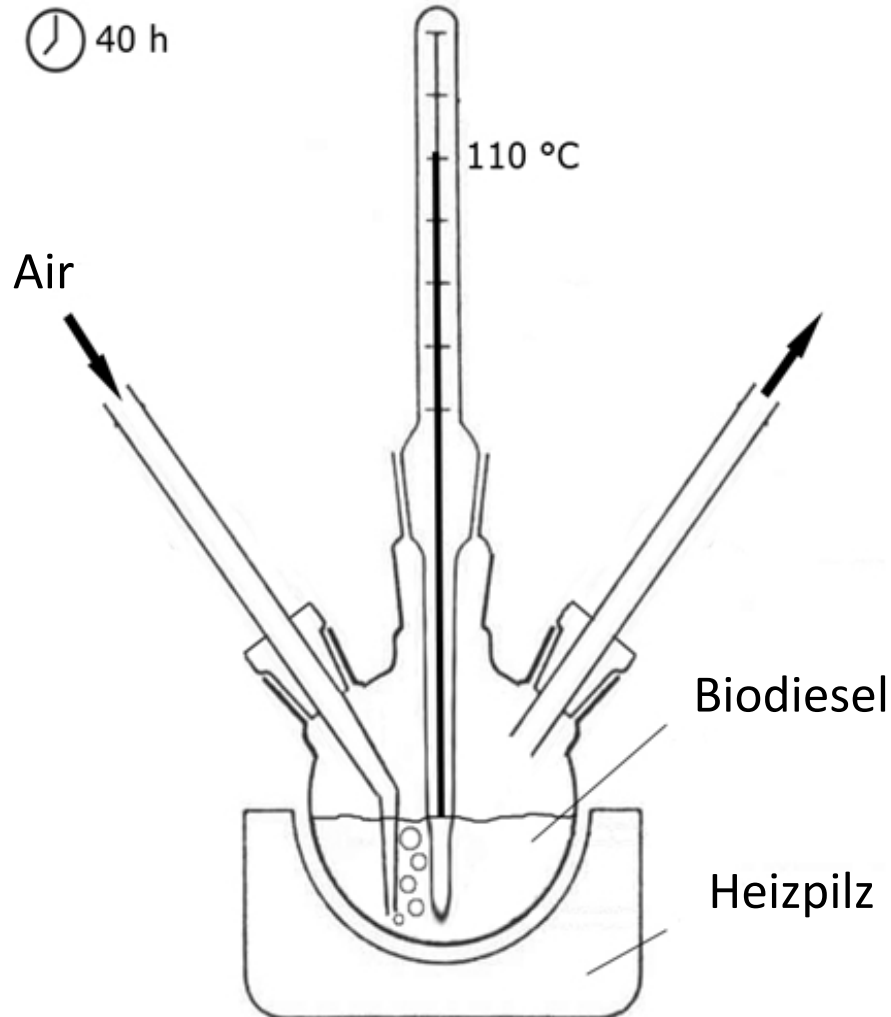


Biodiesel nach neun Wochen auf der Fensterbank



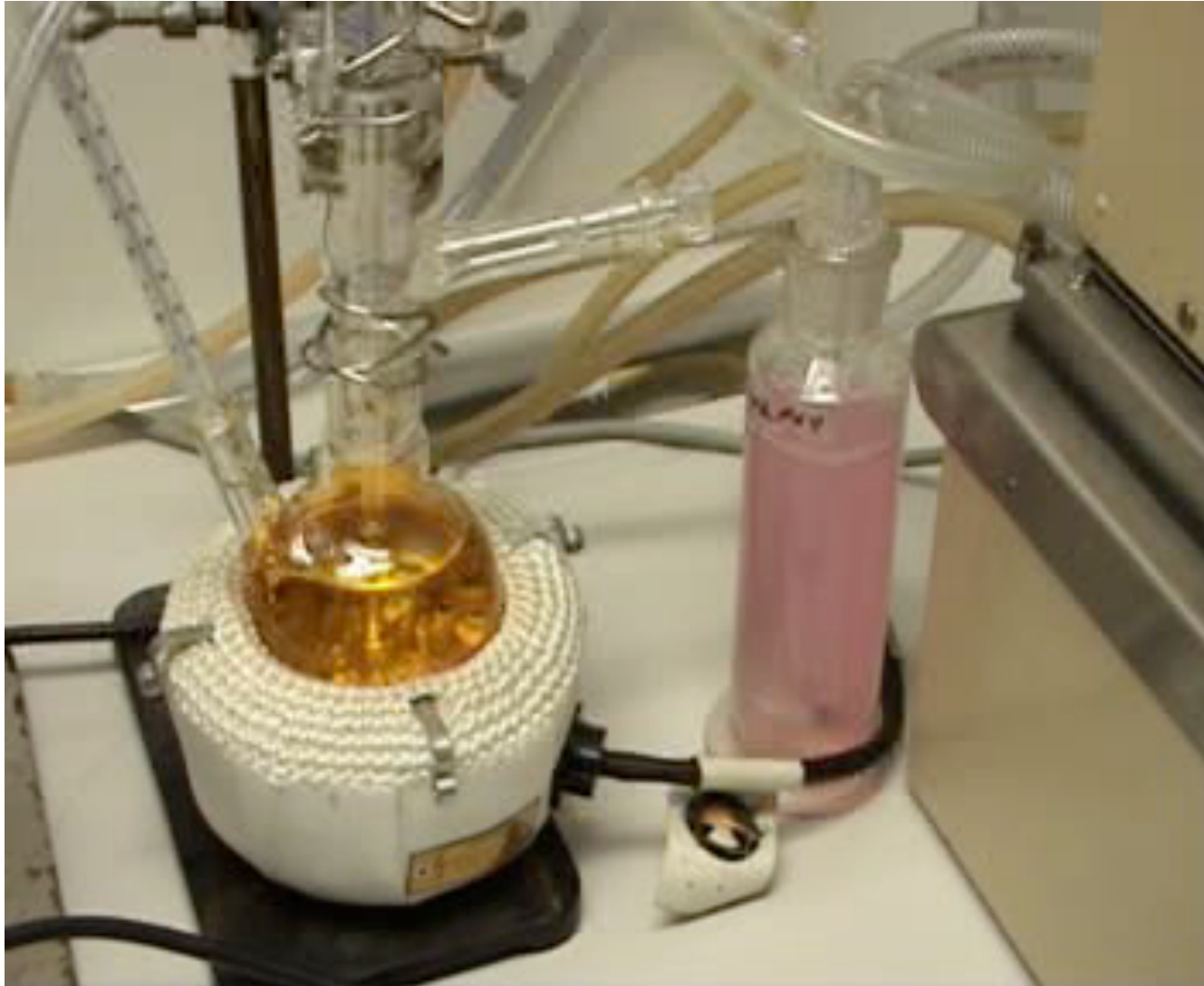
Schlieren



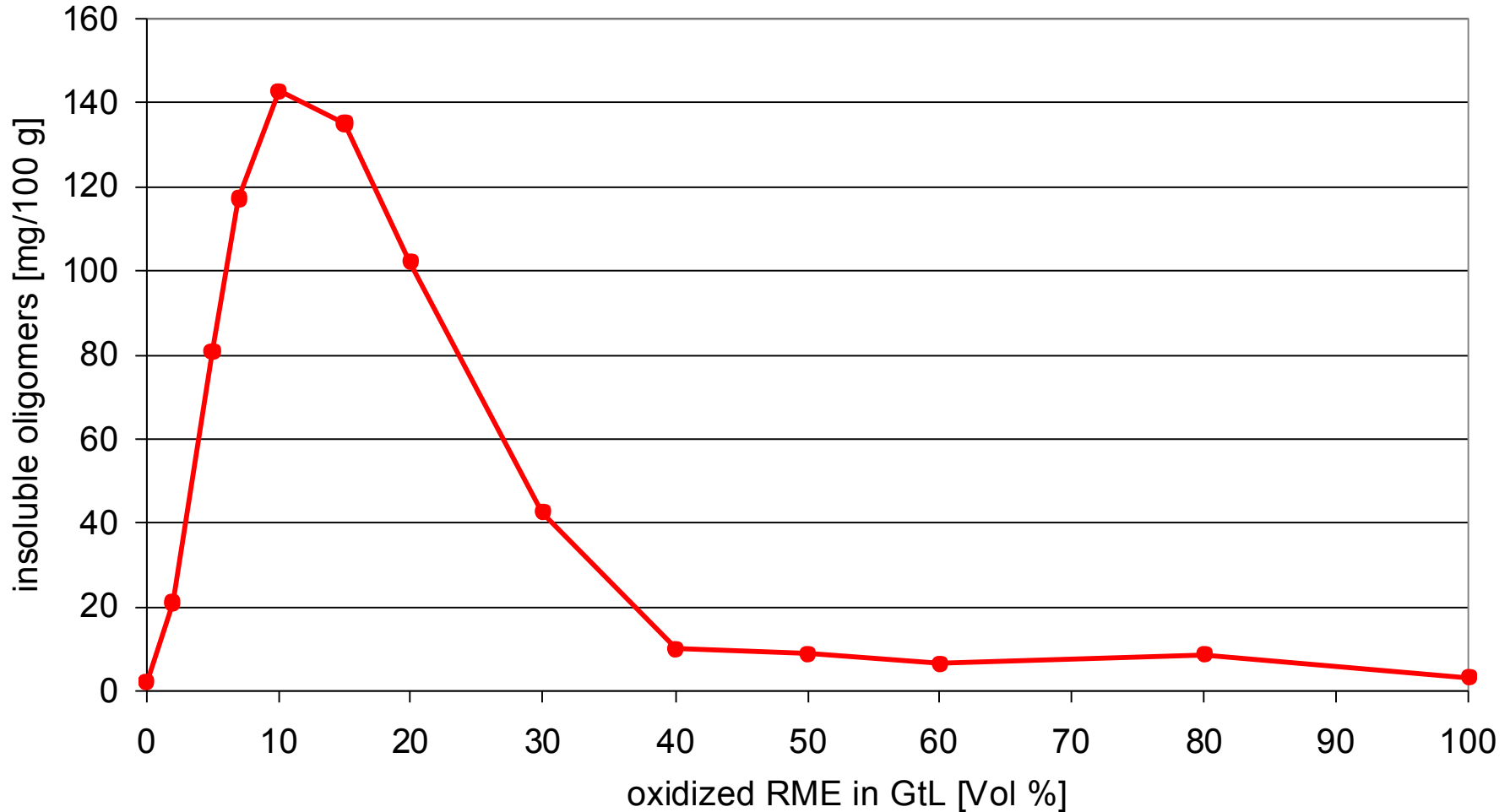


Thermooxidation

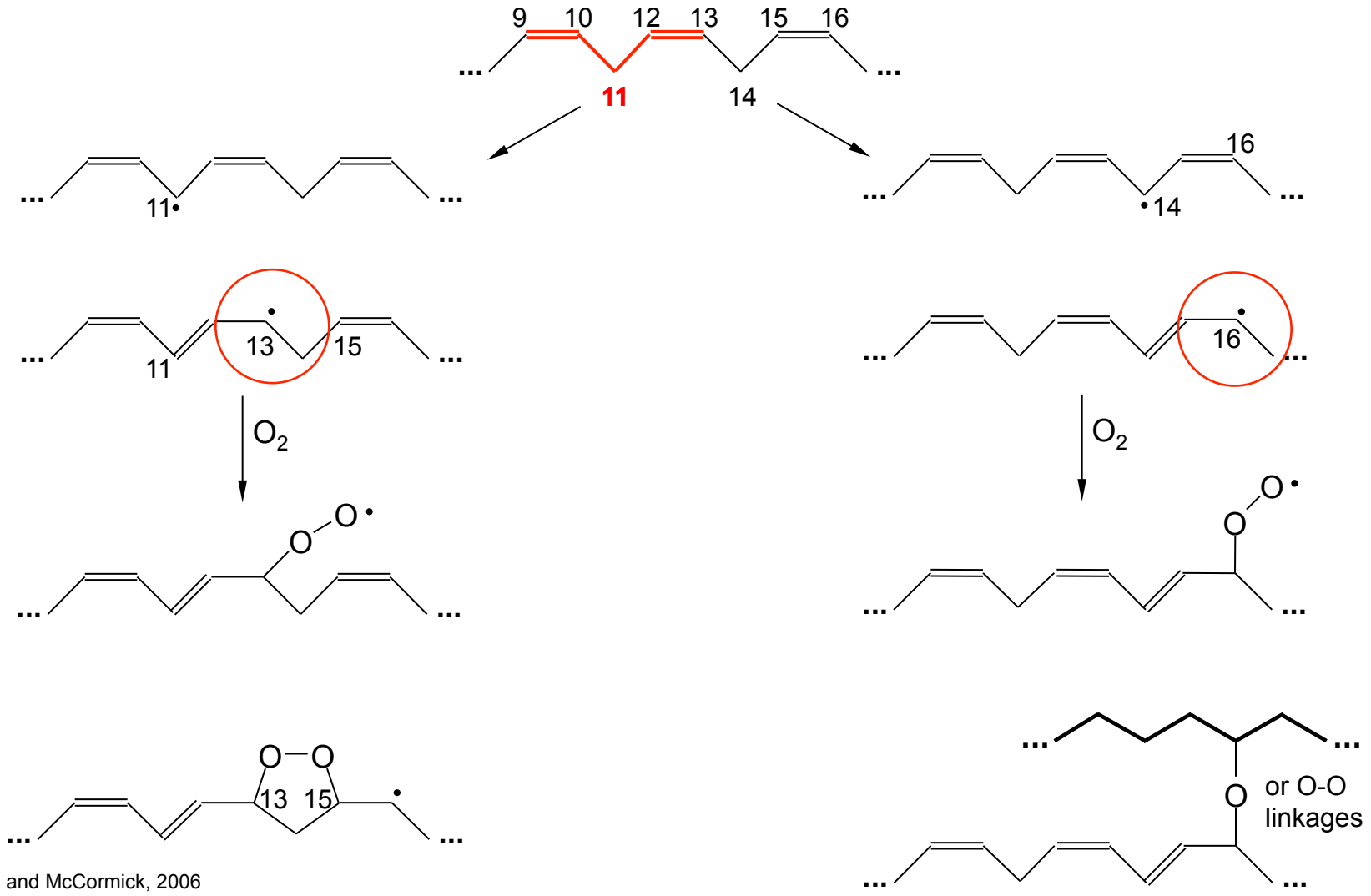
- $T = 110\text{ °C}$
- Umgebungsluft
- 40 h



Sedimente in GTL-Biodieselblends (nach Thermooxidation von Biodiesel)

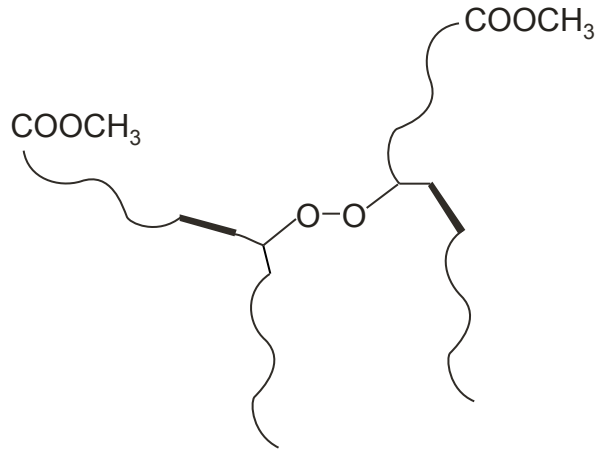


Chemischer Mechanismus zur Oligomerisierung

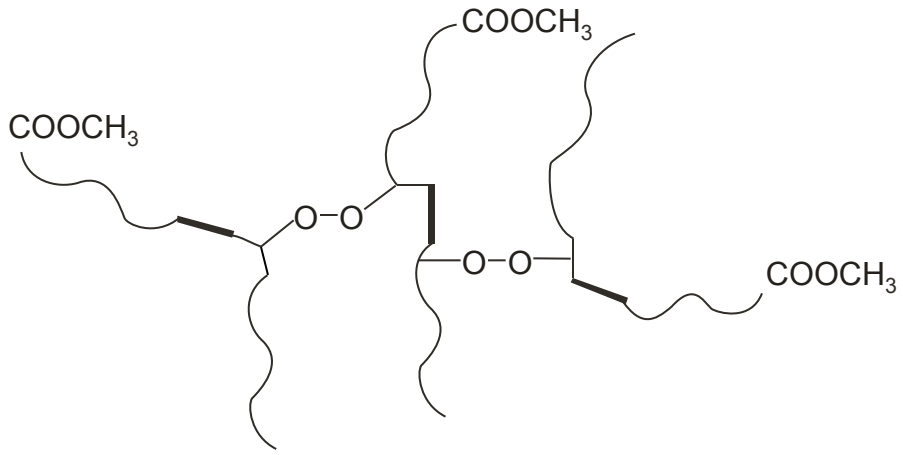


Source: Fang and McCormick, 2006
SAE Paper 2006-01-3300

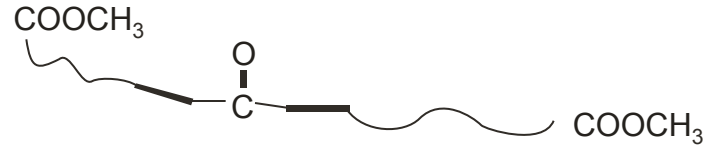
Mögliche Oligomere



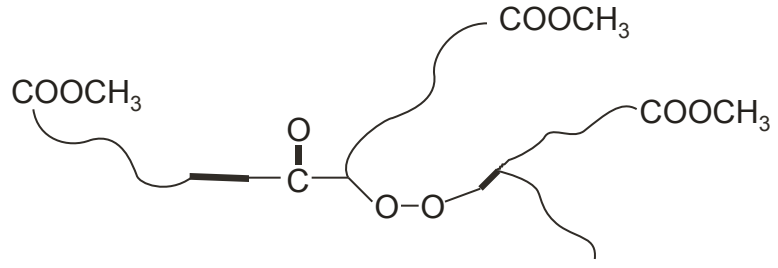
Dimer R_2O_6



Trimer R_3O_{10}



Aldol Dimer R'_2O_5 ($R' < R$)



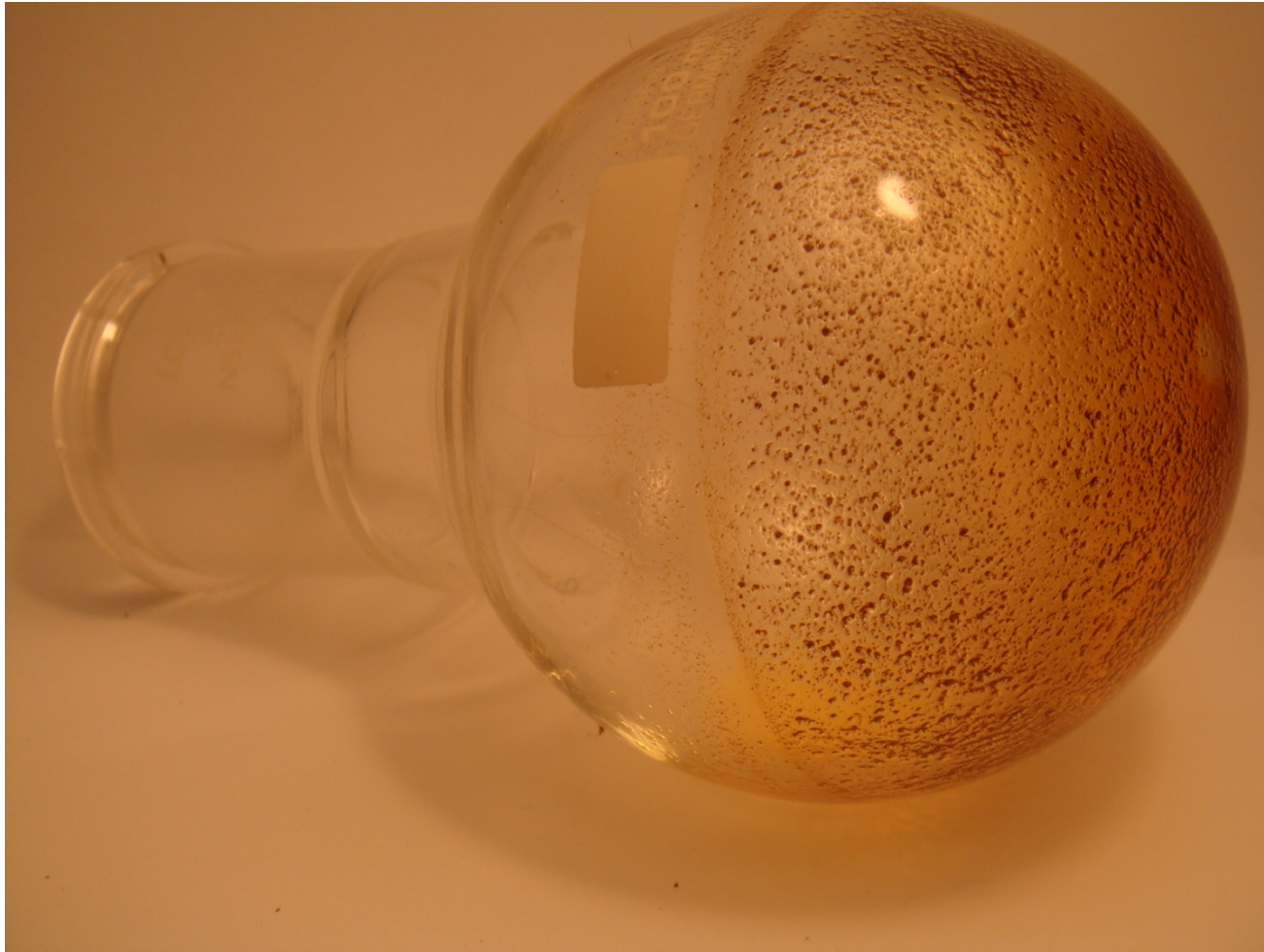
Aldol Oligomer R'_2RO_9

Source: Fang and McCormick, 2006
SAE Paper 2006-01-3300

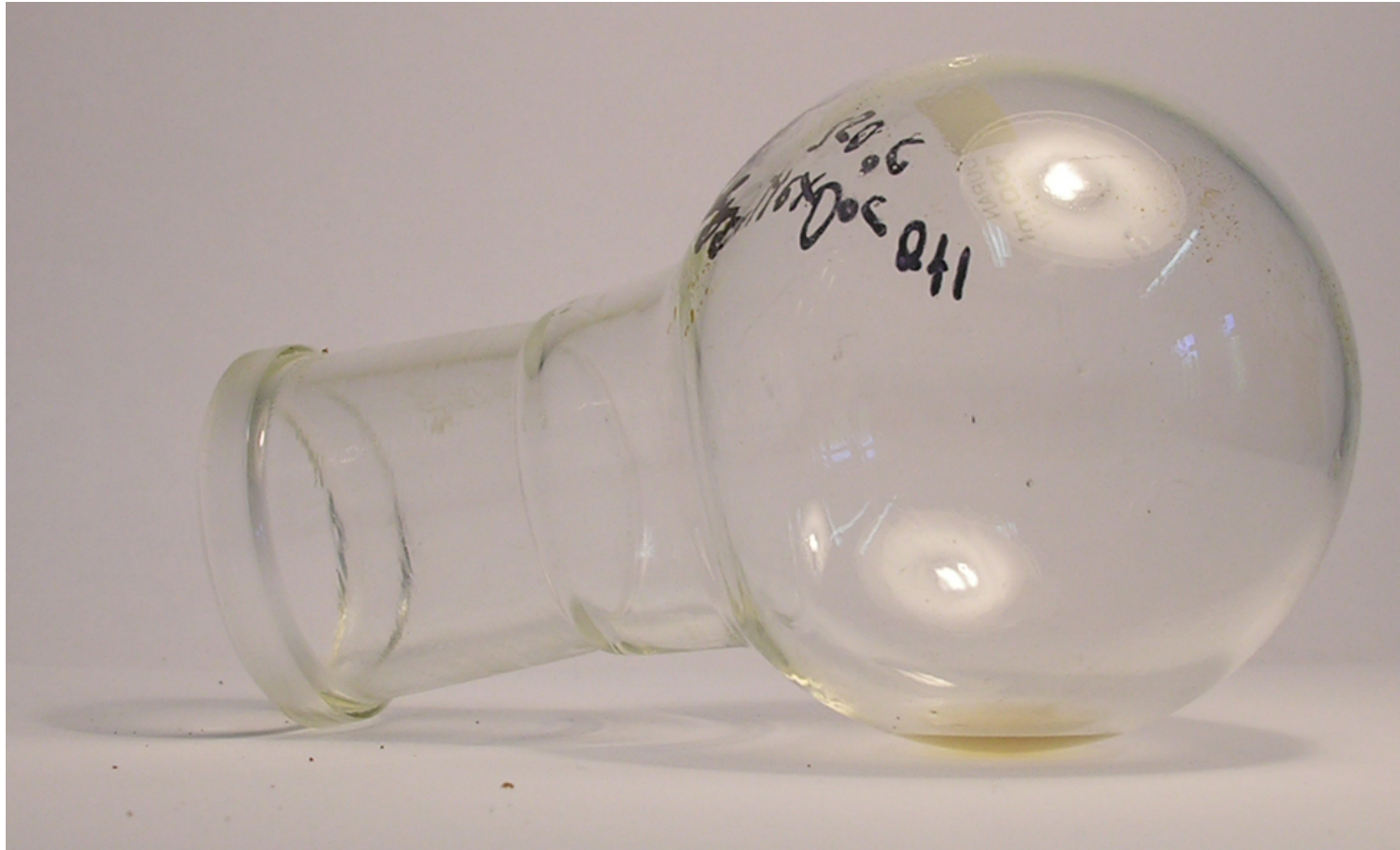
Lösung der Ausfallprodukte durch Alkohol



B15 Aufheizversuch von Biodiesel bei 250 °C



B15 Aufheizversuch von Biodiesel bei 250 °C mit 8% 2-Hexyldecanol



**Vielen Dank für Ihre
Aufmerksamkeit!**

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