



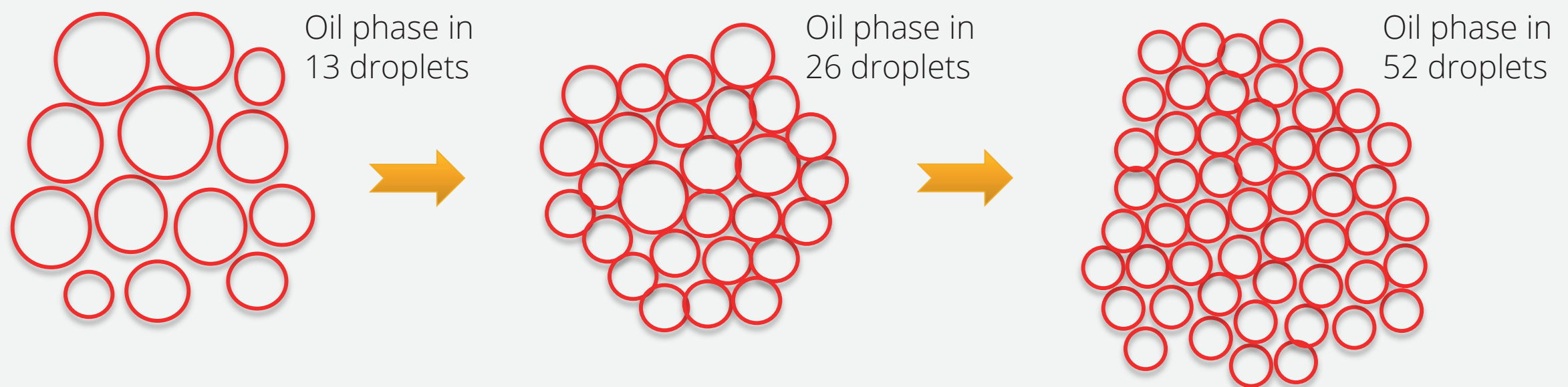
Oil phase and droplet
size of an emulsion...

RAHN

Oil phase and droplet size of an O/W emulsion

Facts on how to influence emulsion structure:

1. The smaller the droplets are, the more space they require. Thus, the droplet size strongly can influence the consistency and stability of an emulsion.



Facts on how to influence emulsion structure:



2. The bigger the oil phase and the smaller the droplet size, the more creamy the texture and as whiter the colour.

Facts on how to influence emulsion structure:



3. The bigger the internal phase is, the tighter the oil droplets are organised in an o/w emulsion. This can lead to an increase of the viscosity if a steric interaction starts.

How to create enough space for the internal phase?



Option 1: Exact control of droplet size during production

Option 2: Reduction of oil phase size (internal phase)

Option 3: Reduction of hydrocolloids (external phase)

Option 4: Change HLB value or emulsifier ratio to avoid a lamellar structure formation