

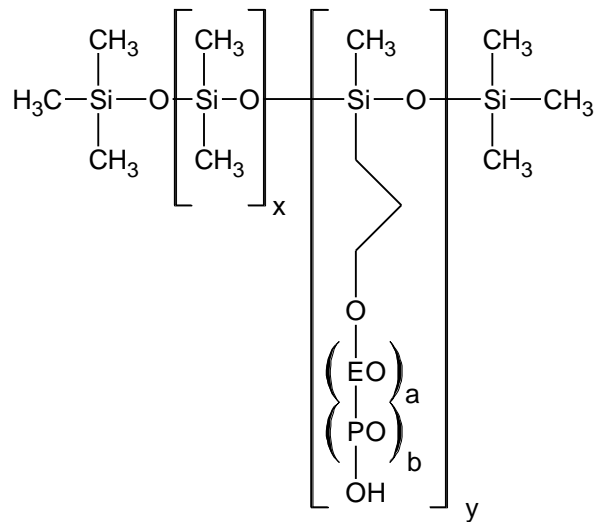
Silicone Surfactants

Synthesis

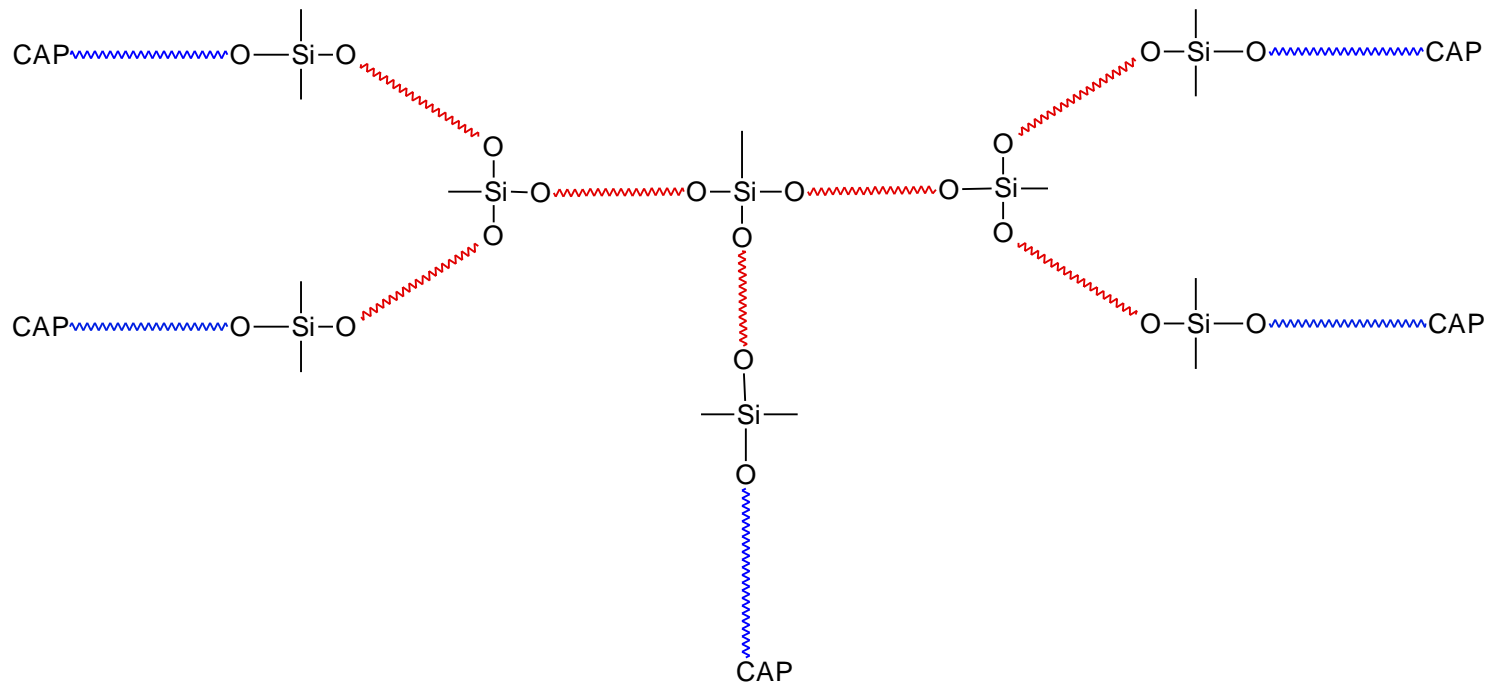
Overview

- General Structure of SPE's
 - Linear Pendant
 - Branched Terminal
- Synthesis
 - Silicone
 - Müller-Rochow Process
 - Hydrolysis
 - Equilibration
 - Polyether
 - OH terminated
 - Methyl capped
 - Acetate capped
 - Coupling
 - Hydrosilation
 - Transesterification

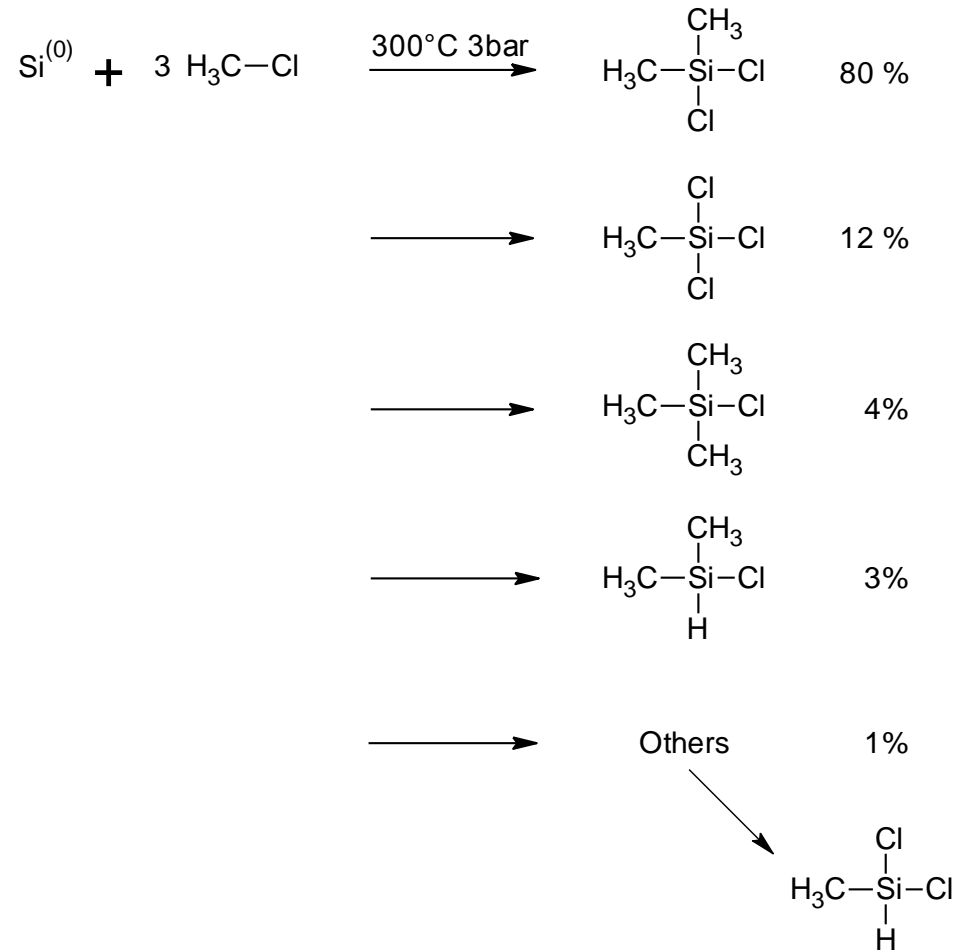
Silicone Surfactant Linear Pendant



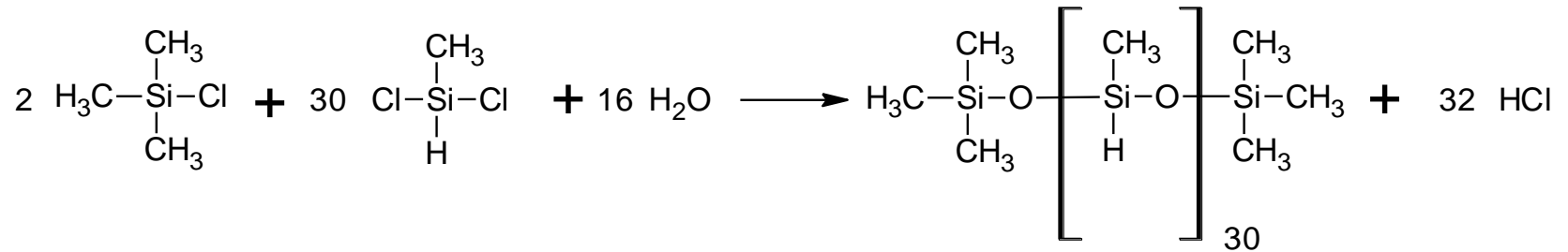
Silicone Surfactant Branched Terminal



Müller-Rochow Process



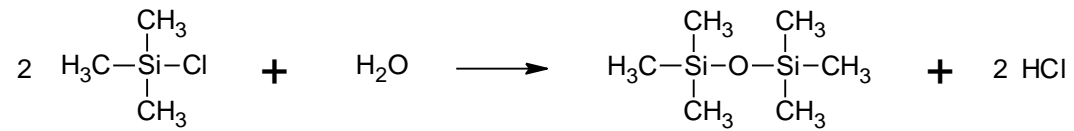
Si-H Fluid Hydrolysis



75-77-4

75-54-7

MM Synthesis

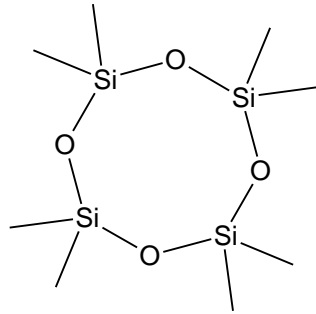


75-78-5

107-46-0

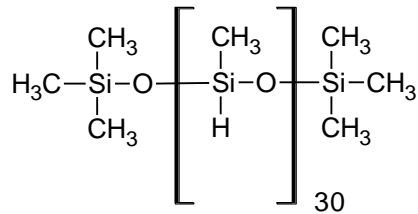
Equilibration I

D4



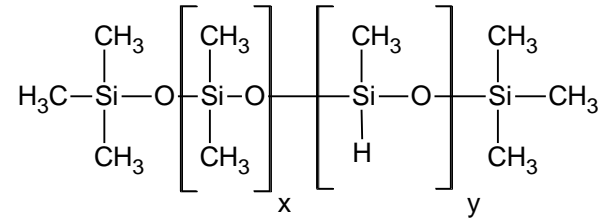
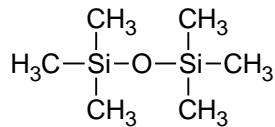
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Si-H Fluid



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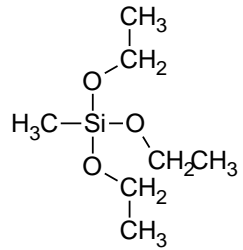
MM



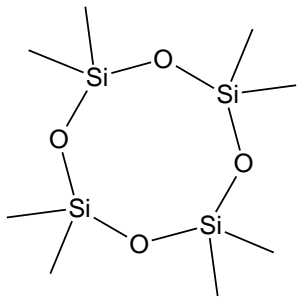
Linear Backbone

Equilibration II

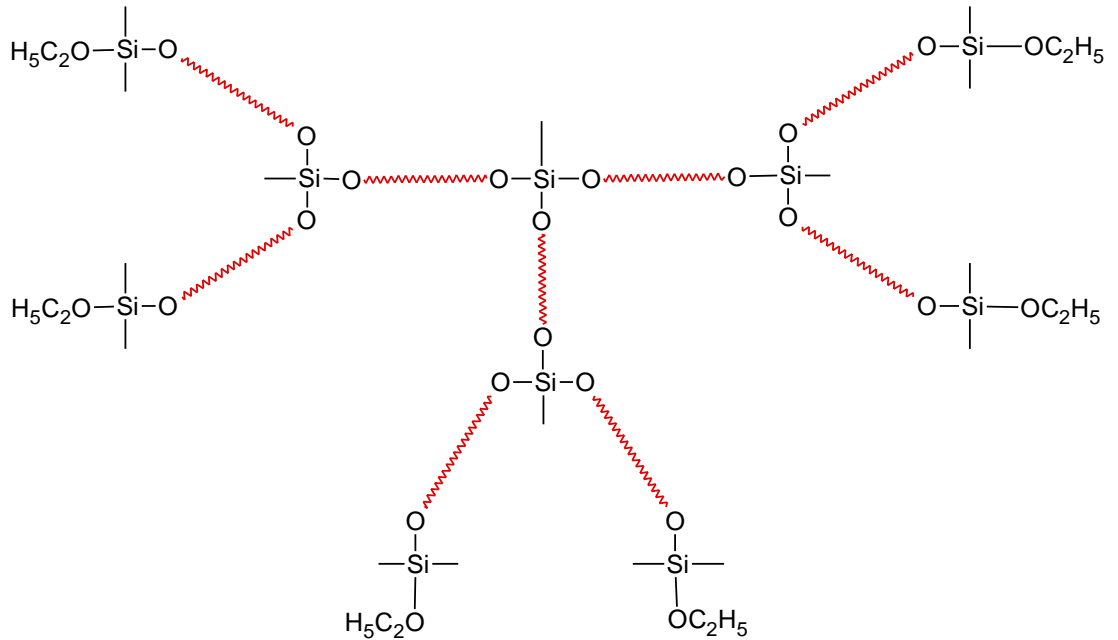
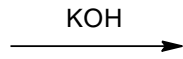
2031-67-6



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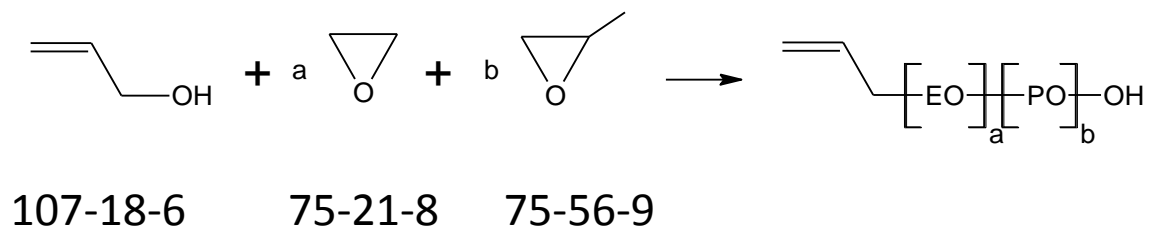


556-67-2



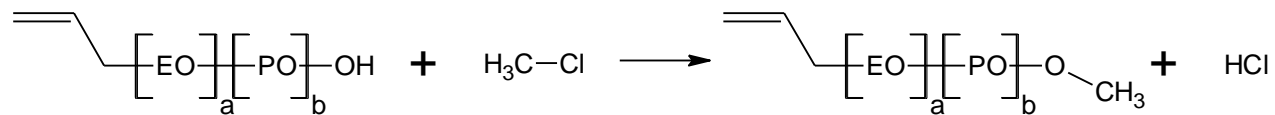
Branched Backbone

Polyether Synthesis OH Terminated



Polyether Synthesis

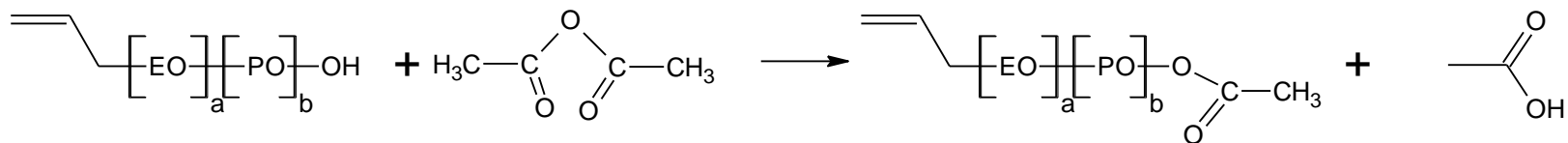
Methyl capped



74-87-3

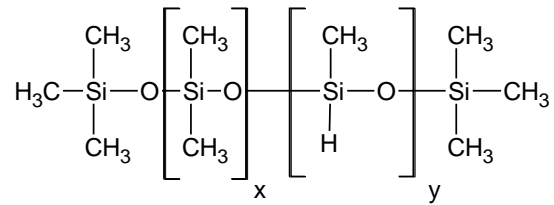
Polyether Synthesis

Acetate capped

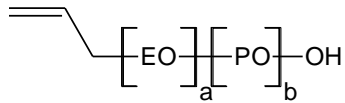


108-24-7

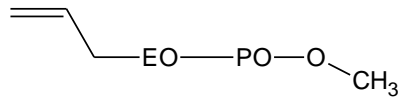
Hydrosilation



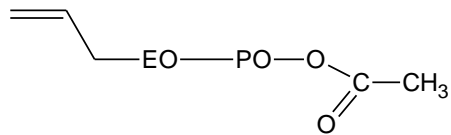
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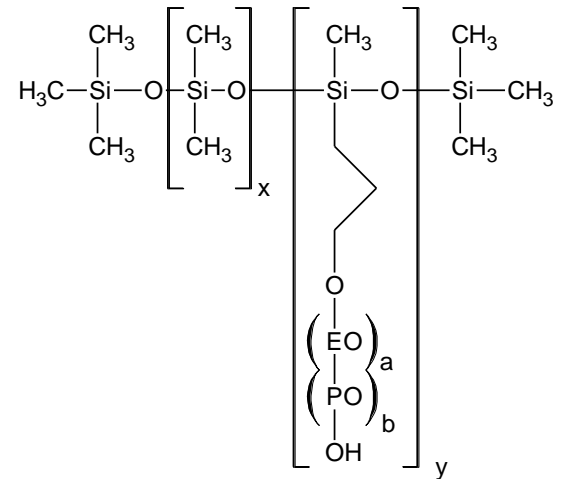
and/or



and/or



Pt Catalysts



Transestrification

