

Abstract Submitted
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Dynamics of spreading thixotropic droplets¹ ARAN UPPAL,
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has become of increasing interest for a variety of applications in recent years. The
lubrication approximation has been often used in the study of such fluids, especially
in the presence of a free surface. The lubrication approximation aims to remove
the explicit depth dependence from the resulting evolution equations by utilising
the naturally occurring small aspect ratio. However, this is not possible with the
inclusion of a structure parameter to describe the thixotropic behaviour. Thus, we
consider a range of closures to simplify the evolution equations and compare against
the full simulation results.

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