Rheological relationship between spreadability and its viscoelastic properties of cosmetic soft material

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This presentation is about rheology properties about viscoelastic complex fluid especially for 'foundation cosmetics'. Commonly used cosmetics like foundations and lotions are viscoelastic complex fluids. These kind of cosmetics have both viscous behavior and elastic behavior. When people apply cosmetics on their skin, high shear stress on cosmetics change their rheological properties. A bundle of foundation relaxes above yield stress, which means its rheological property changes from elastic behavior to viscous behavior. Using these rheological properties, it is possible to quantify and define spreadability of cosmetics in rheological definitions. Moreover, it can provide useful evaluation criteria of foundation cosmetics and contribute on developing new products on cosmetic industries.