Yield-stress fluids can be 1 1 2 1 3 extensible

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Yield-stress fluids are capable of surviving much larger extensional strains than would be indicated by the behavior of common "model" materials such as the Bentonite solution (top). The other materials shown are relevant to applications, including (continuing from top): Aquafresh toothpaste, an ink used in printing, and Hubbabubba Tape bubble gum. The high extensibility may affect performance requirements in applications. These images demonstrate the need for better model materials and beg for constitutive models that can capture this important behavior.