Silicone Elastomer Blends

Gabriel Velarde, Material Science and Engineering
Research Mentor: Kevin Kim

Abstract

Silicones currently remain as a relatively new polymer material class that has surpassed numerous benchmarks in regards to functionality, applicability, and finally, costs. This paper aims to provide a comprehensive review of the current standing of the multifunctional silicone field. Namely, discussion regarding the discovery, chemical structure, applications, and future work will be carried out to provide the reader with a fundamental understanding of the topic at hand. Nonetheless, with such a background established, readers may begin to develop the necessary mindset in incorporating the silicone polymer material class within the fields of electronics, composites, and biomaterials.