

**Mechanical Recovery Properties of Symmetric Amorphous
ABS/ABS Interface**
(대칭형 비결정 ABS/ABS 계면에서의 회복된 기계적 성질)

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Polymer interfaces are omnipresent and play an important role in determining the properties, reliability and function of materials. Polymer interfaces can be classified into four broad groups, including symmetric polymer-polymer interfaces, asymmetric polymer-polymer interfaces, polymer-nonpolymer interfaces and multicomponent polymer interfaces. The symmetric interfaces are most commonly encountered in manufacturing processes. Many researchers have studied the mechanisms of strength development at amorphous interfaces which consists of several steps. The more expansive our knowledge of polymer interfaces is, the more sophisticated our ability to fabricate polymer materials can be in artificial organs, rocket motors, advanced composite space vehicles, and so on.

In this study, ABS/ABS was introduced to obtain an information of symmetric amorphous polymer-polymer interface. We investigated how interfaces of polymer formed, predicted their structure, and gained an insight into understand the relationship between interface structure and mechanical properties.

1. D. B. Kline and R. P. Wool, *Polym. Eng. & Sci.*, 28, 52 (1988)
2. R. P. Wool, "Polymer Interfaces : Structure and Strength", Hanser Publishers, New York, (1995)