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Rheological and Self-Healing Properties of Poly (Vinyl Butyral)

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Abstract: A new self-healing material was developed utilizing molecular entanglements for poly(vinyl butyral) (PVB) containing plasticizers. It was found that PVB shows autonomic self-healing behavior even below the glass transition temperature Tg because of marked molecular motion at surface. Moreover, the plasticizer addition enhances the chain mobility, leading to good healing behavior.

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