Preparation and properties of conductive adhesive for automobile body

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The adhesive for automobile is very important to reduce weight. Therefore assembly of automobile without adhesive is difficult. Neverthless, the market for automobile adhesive is not large. But use of the adhesive has been increasing steadily depending on alloy of the target material to be bonded. For this reason, adhesives satisfying environment, safety, quality, and cost have been developed. The productivity of automobile assembly has been greatly improved by weld bond technology that is combination of bonding and resistance welding. These adhesives are usually manufactured in batch method from various materials in accordance with using parts, processes and functions. And the characteristics can be changed significantly depending on the ratio of raw materials. This has great advantages in product differentiation, but using without understanding of the characteristics may gives serious problems in quality and durability. The adhesives for weld bond technology, which are mostly made of one component epoxy resin, reduce the number of spot and weight, relax the stress concentration of joints, and enhance the optimum strength and fatigue life as well. In this study, we prepared the conductive adhesive for resistance welding and investigated the properties.