

PPS 素材向け耐熱塗料

HEAT RESISTANT PAINT FOR THE PPS MATERIALS

真野 靖章

Yasuaki MANO

要 旨

PPS（ポリフェニレンサルファイド）素材への付着性および耐光性、耐熱性に優れたシリコン樹脂塗料を開発した。この塗料は難付着材として知られる PPS 素材への付着性を実現しており、また樹脂の主骨格にポリシロキサンを導入したことにより 230℃×240 時間の環境下での優れた耐熱性を有している。この PPS 素材向け耐熱塗料を用いることで、これまで難しかった PPS 素材への意匠性の付与や耐光性の強化が可能となることから、PPS 素材を用いた自動車部品や照明部品、家電部品などの市場拡大が期待される。

Abstract

We have developed a silicone resin paint with superior light and heat-resistant properties, as well as excellent adhesion to polyphenylene sulfide (PPS) materials. The paint achieves adhesion to PPS materials, which are known for being particularly difficult for paints to adhere to, and also possesses superior heat-resistance under sustained high-temperature conditions (230°C × 240 hours) by introducing polysiloxanes (also known as silicones) into the main resin polymer backbone. Using this heat-resistant paint for PPS materials will enable the addition of more stylish designs and enhancement of light-resistant properties (which have been previously regarded as difficult to achieve for these materials). As a result of this, the market for auto parts, lighting components, home electronics/appliance-related components and other parts made from PPS materials is expected to grow.