

ABSTRACT OF THE DISCLOSURE

HIGH-TRANSPARENCY LASER-MARKABLE AND LASER-WELDABLE
PLASTIC MATERIALS

The present invention relates to high-transparency plastic materials which are laser-markable and/or laser-weldable due to a content of nanoscale laser-sensitive metal oxides. These plastic materials, which may be provided as molded bodies, semifinished products, molding compounds, or lacquers, particularly contain metal oxides having particle sizes from 5 to 100 nm and a content of 0.0001 to 0.1 weight-percent. Typical metal oxides are nanoscale indium-tin oxide or antimony-tin oxide. These materials may be used in particular for producing laser-markable production products.