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**THE INFLUENCE OF RECYCLING PROCESS OF EXTRUDED UNFLAMMABLE POLYETHYLENE ON ITS SURFACE GEOMETRIC STRUCTURE**

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Constructional and installation elements performed from the unflammable polyethylene (PE) more and more often joint by gluing and drift on it the different kind of the coat. More over this elements are expose to material recycling process and next extrusion process. This article presents research of the influence of material recycling and extrusion processes of polyethylene containing a mixture of aluminum hydroxide ATH, magnesium hydroxide MH and other aids on his value of the surface free energy (SFE), and roughness.