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## SURFACE-FLUORINATION OF POLYPROPYLENE UNDER STATIC GASPHASE CONDITIONS

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*With the method of static gasphase fluorination (fluorine-nitrogen mixture up to 22 %) polypropylene-surfaces (fleece or foil) can be fluorinated at room temperature. The resulting fluorinated polymer has fluorine contents up to 16,9 %.*

*The degree of fluorination for polypropylene with defined surface depends under static conditions on*

- the fluorine content of the gas mixture*
- the time of direct contact*
- the relative ratio between polypropylene-surface and offered amount of fluorine.*

*The removal of the reaction co-product HF promotes the progress of fluorination.*

*We have characterized our fluorination products by increase of mass, analytical fluorine content, a.t.r.-, e.s.c.a-, and r.e.m.-measurements.*

*On printing with dispersed dyestuffs a significant increase of colouring strength compared with PP and FEP is observed.*

*For fluorinated PP-surfaces we also found an increase in adhesion binding properties.*