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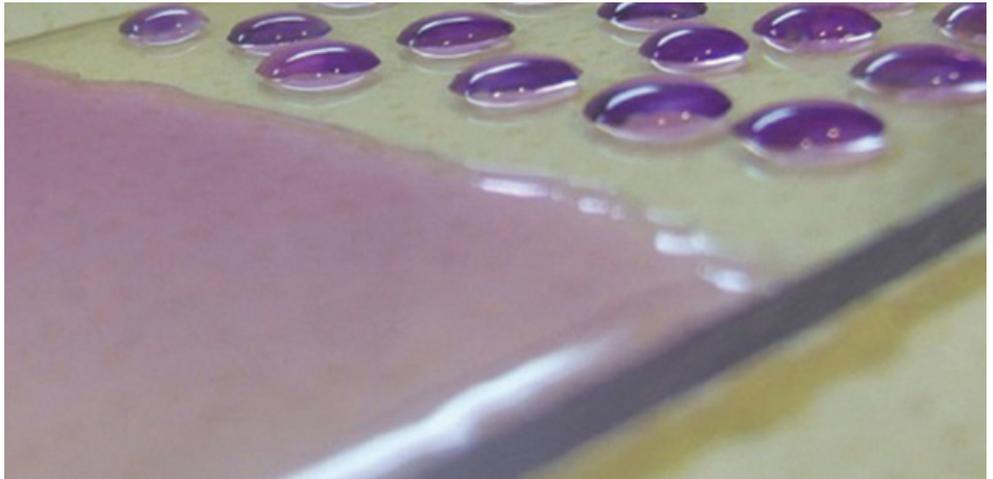
Polyester Surface Treatment

Polyester (PET) film in its raw state, is inert to most chemical attacks. This characteristic is the result of the biaxial orientation process (BOPET) and the 'molecular layering' polyester undergoes during manufacturing. And, while chemical resistance is a desired trait by production engineers in applications where the introduction of cleaners containing chemicals exists (e.g. printed and flexible electronics); it requires a surface or print treatment to promote adhesion to most inks.

PET films almost always have at least one surface "roughened" either by the addition of slip agents or by a surface coating. For thin films (<200 ga), oftentimes slip agents are added for good winding and handling. Films greater than 200 ga may also contain slip agents depending on the desired optical levels. Minus the addition of slip agents, poor web handling or blocking of film layers might result.

Some PET film types contain fillers that serve to both roughen the surface topography and act as a surface slip or release for improved web handling. If an optically clear film is desired, then it is necessary to add a surface treatment (print treatment or primer).

PET films can be coated during manufacturing to produce surfaces more receptive to subsequent coatings. Untreated PET has a surface energy of 42-46 dyne/cm; corona treatment yields 54 dyne/cm and above. Corona treatment is not uncommon, though its treatment effects deteriorate with time.



Tekra has an advanced understanding of the portfolio of unique polyester film types and surface treatments. Contact a sales representative for a consultative review of your requirements and a polyester film type that meets or exceeds your target application.