

## Alameda Company

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## **Definition of Terms**

**Dyne Level:** A measurement of the wetability of the surface of the material to be printed. A DYNE level of at least 34 and not more than 50 is necessary for printing plastics on conventional offset; a measurement of 38 to 42 is required for UV Offset.

<u>Corona Treatment</u>: A process that makes the surface of the material able to accept ink. Corona treatment has a very short useful life and once it deteriorates the material is no longer printable. It is Required for Styrene, polyethylene, and polypropylene; not required but useful for rigid calendared vinyl; seldom used for oriented polyester.

<u>Topcoated</u>: Material that has a coating before it is printed, can be one or two side coated. Topcoat for plastics usually is Aqueous or UV based. This is not the coating that is applied at the press as overprint to protect ink.

<u>Prepared for Printing:</u> This is a generalized term which means the plastic to be printed has had the necessary treatments or converting which makes it ready for the press.

<u>Tipped-On sheet or tipped sheet:</u> This is a converting process that puts a ¼" glue line on the long dimension to adhere a bond sheet to the plastic to be printed. The plastic sheet and the bond sheet pass through the press together. It is usually only done for clear, gloss plastic since it helps reduce scratches and many presses cannot 'see' a clear substrate. After printing, the tipped sheet is cut off, resulting in an interleaved stack.

<u>Masked Sheets:</u> A translucent thin cling plastic that is applied when the plastic substrate is made. It is usually used on PETG and heavier gauge materials of 30 mils and thicker.

<u>Direct to Plate or Press(DI)</u>: If the printing process itself is conventional then this is not considered a digital printing process, and plastic substrates do not need special digital coatings.

<u>Polyesters:</u> Polyester is a type of resin, used to make Oriented Polyester (sometimes called Mylar); PETG, which is extruded polyester; and APET, which is generally unprintable. Although these all are the same resin, the applications and performance characteristics are very different for each of the polyesters.

<u>Vinyls:</u> Vinyl or PVC is a type of resin, used to make many different plastic substrates. For offset printing, Rigid Calendered Vinyl, Static Cling Vinyl and Flexible Vinyl for label stock are most common. Others used in screen printing are Reinforced or Scrim Vinyl, and Banner stock. As with the other plastics, each type of vinyl has very different characteristics and uses.

<u>Olefin Plastics:</u> This general term describes plastic materials that are made with the addition of fat or olefin. They must be Corona Treated in order to be printable. Some olefin plastics are styrene(HIPS), polypropylene(PP) and polyethylene(PE).

**Synthetic Papers:** A very broad generalized term that is used for substrates that are some combination of plastic resin and talc or calcium carbonate( fillers). The greater amount of filler the more the material feels like paper. Another type of synthetic paper is a construction, lamination or sandwiching of paper and plastic.

Please feel; free to contact us for additional information., at Alameda Company, Arianne Heller, Product Manager, at 818.347.0529.