

## INDILABEL - GLOSSARY OF LABEL TERMS

## A

**AB Coating:** Anti-block coating is applied to the non-release coated side of the liner to prevent ink transfer to the backside of the liner. It is generally used with film face materials or heavy adhesive coat weights.

**Abrasion Resistance:** Label surface resistance to something that rubs against it, including the label material itself, ink, or a protective coating.

**Abrasiveness:** The tendency of a paper, paper coating, or ink to abrade or dull die edges, slitting blades, and printing plates due to friction.

**Accelerated Aging:** Procedures for subjecting pressure sensitive label material to special environmental conditions in order to predict the course of natural aging.

**Acetates:** Transparent and cellulose films used as face materials; cellulose is a plant product.

**Acrylic Adhesive:** See: Adhesive: Acrylic.

**Acrylic Based Adhesive:** See: Adhesive: Acrylic Based.

**Adhesion/Adherence:** A bond established upon contact between two surfaces.

**Adhesive:** A substance capable of holding materials together by surface attachment. (American Society for Testing Materials)

**Adhesive: Acrylic:** A pressure sensitive adhesive based on high-strength, acrylic polymers. It can be coated as a solvent or emulsion.

**Adhesive: Acrylic Based:** A pressure sensitive adhesive with acrylic polymer base.

**Adhesive: Aqueous:** A water-based pressure sensitive adhesive.

**Adhesive: Cold Temperature:** An adhesive that adheres to refrigerated or frozen substrates (generally +35 degrees F or colder).

**Adhesive: Dry Lap:** See: Adhesive: Pattern Coated.

**Adhesive: High Temperature:** An adhesive that withstands sustained, high temperature (+200 degrees F or higher).

**Adhesive: Hot Melt:** A pressure sensitive adhesive that is applied to the release liner at an elevated temperature and then cools into a conventional, highly-tacky pressure sensitive adhesive.

**Adhesive: Opaque:** A darkened adhesive that restricts printing from showing through the adhesive-coated side of a label.

**Adhesive: Pattern Coated:** Refers to the spacing arrangement of areas of adhesive on the face material that are coated parallel to the machine direction. Also referred to as dry lap, strip coated, or zone coated adhesive.

**Adhesive: Pattern Gummed:** An adhesive coating that alternates strips of adhesive with non-adhesive areas that is applied parallel to the machine direction. The non-adhesive areas of the label are frequently used as lift tabs for order picking labels.

**Adhesive: Permanent:** A pressure sensitive adhesive characterized as having relatively high ultimate adhesion to a wide variety of substrates. The label either cannot be removed intact or requires a great deal of force to be removed.

**Adhesive: Removable:** A pressure sensitive adhesive characterized by low ultimate adhesion. The label can be removed from most substrates without damaging the surface or leaving adhesive residue or stain.

**Adhesive: Rubber Based:** A pressure sensitive adhesive derived from natural or synthetic rubbers.

**Adhesive: Strip Coated:** See: Adhesive: Pattern Coated.

**Adhesive: Strip Gummed:** See: Adhesive: Pattern Gummed.

**Adhesive: Water Based:** A pressure sensitive adhesive derived from water based materials.

**Adhesive: Water Soluble:** A pressure sensitive adhesive in which all components are water soluble.

**Adhesive: Zone Coated:** See: Adhesive: Pattern Coated.

**Adhesive Bleed:** The adhesive migration from pressure sensitive material and labels. Note: Especially critical in laser printing. See also: Cold Flow, Flow, Ooze.

**Adhesive Deposit/Adhesive Residue:** The pressure sensitive adhesive remaining on a substrate when a label is removed.

**Adhesive Splitting:** A condition in which portions of pressure sensitive adhesive remain on the face material and portions remain on the substrate when the label is placed under stress or removed. See also: Cohesive Failure.

**Adhesive Strength:** See: Peel Adhesion.

**AGA:** American Gas Association.

**Aging:** The changes which occur to a material with the passage of time.

**AIAG/Automotive Industry Action Group:** A group made up of manufacturers in the automobile industry that have formulated labeling and packaging standards for sub-assembly automobile vendors.

**Anchorage:** The specific adhesion of a pressure sensitive material to a substrate.

**Anchor Coat:** See: Barrier Coat, Primer, Sealer Coat, Tie Coat.

**Anvil Cut Labels:** Pressure sensitive labels that are die cut through all components of the label stock, including the liner. Also called steel-to-steel, zero tolerance, punched out, or blanked out labels.

**Application:** (1) Placement of a label on a substrate. (2) The conditions under which a label is to be used; the life-cycle of the label.

**Application Temperature:** Temperature of a label material at the time of application. All adhesives have a minimum application temperature rating. Testing is recommended in minimum and maximum application temperature situations.

**Applicator:** A device that automatically feeds and applies pressure sensitive labels to a substrate or product.

**ARO/After Receipt of Order:** Refers to the time required to manufacture a finished product after a firm order is received.

## B

**Backing:** See: Carrier, Liner, Release Liner.

**Back Splits:** Linear cuts put in the liner during the coating process, or while on-press, to meet specialized end use requirements. See also: Slit Back, Split Back/Split Liner.

**Bar Code/Bar Code Symbol:** A specific pattern made of lines (or bars) and spaces, of varying width, which represent alpha or numeric data in machine-readable form. The most general format for a bar code consists of: a lead margin, a start character, data or message characters, a stop character, and a trailing margin. There are over 30 bar code symbologies. See also: Machine Readable, Picket Fence, Scanability, Step Ladder.

**Barrier Coat:** A coating applied to a face material on the side opposite the printing surface that lies between the material and the adhesive coat. It provides increased opacity to the face material, and/or prevents migration of adhesive to the face material, and/or improves anchorage of adhesive to the face material. See also: Anchor Coat, Primer, Sealer Coat, Tie Coat.

**Basis Weight:** The weight in pounds of a ream (either 480 or 500 sheets) of paper cut to a given size. See also: Substance/Substance Number.

**Battery Label Stock:** A durable, acid-resistant label material designed for the demanding environment associated with automotive batteries.

**Bleed/Bleed Through:** The migration of components from the adhesive or substrate onto the face material, resulting in its mottled appearance and possible dysfunction of the adhesive.

**Blocking:** Adhesion between sheets or rolls of pressure sensitive labels usually due to cold flow, improper drying of inks, or improper curing of coatings and adhesives. See also: Cold Flow.

**Blown-On Labels:** A method of label application that uses air pressure to remove the label from the carrier and position it on the substrate.

**Break:** A tear in a roll of face material or release liner. Such defects are generally spliced and marked by a flag during printing.

**Brightness:** The (blue light) reflectivity of a sheet of paper measured under standardized conditions on an instrument designed and calibrated specifically for that purpose.

**Brittleness:** That property of a material which causes it to break or fail when deformed by bending. It is usually of practical interest only when the deformation producing failure is small.

**Burster:** A mechanical device used to separate cross-web perforations at intermediate locations between labels.

**Bursting Strength:** The pressure required to rupture a paper specimen when it is tested with a Mullen instrument under specific conditions. It is largely determined by the tensile strength and extensibility of the paper. Also referred to as Mullen.

**Butt-Cut Labels:** Rectangular, square-cornered labels in continuous form that are separated by a single knife cut to the liner. Typically, the matrix is not removed. See also: Butt Labels, Knife-Cut Labels.

**Butt Labels:** See: Butt-Cut labels.

**Butt Roll:** See: Stub Roll.

## C

**Calender Finish:** A term applied to a paper with a glazed surface finish created by means of calenders (cast iron rollers with chilled, hardened surfaces). Other terms include machine finish, English finish, super-calendered and calender friction glazed. Semigloss litho and high gloss paper are examples of calendered paper.

**Calender Friction Glazed:** See: Calender Finish.

**Caliper:** The thickness of a sheet of paper or plastic measured in units of one thousandth of an inch; the measuring units are called mils or points. See also: Thickness.

**Camera-Ready Art:** Black and white or color-separated artwork supplied in its final form for printing preparation. Typically, it requires no modification other than photo enlargement or reduction. See also: Mechanical artwork, Line Art, Pasteup.

**Carrier:** See: Backing, Liner, Release Liner.

**Cast-Coated Paper:** A paper coating which is allowed to harden or set while in contact with a finishing surface. In general, cast-coated papers usually have a high gloss finish.

**Checking:** The presence of hairline cracks in a varnish coating, lacquer coating, or plastic coating. See also: Crazing.

**Chemical Drum Label:** A label of durable material ( like vinyl, polyester, or Kimdura® which resists adverse conditions associated with chemical drum containers.

**Chemical Resistance:** The resistance of a pressure sensitive label to the deteriorating effects of chemicals, under specified conditions.

**Clear Coat:** A coating that protects the printing and the surface of a pressure sensitive label from abrasion, sunlight, chemicals, moisture, or any combination of these. Varnish and lacquer are examples of clear coats. See also: Lacquer, Overcoat, Protective Coating, Varnish.

**Coat Weight:** The amount or weight of coating per unit area. This is expressed in various units including grams per square meter or pounds per ream. Applies to adhesives, primers, varnishes, and lacquers.

**Cohesion:** The internal strength of a pressure sensitive adhesive, its resistance to cold flow, and its resistance to failure (or splitting) when labels are removed or placed under stress. See also: Cohesive Strength, Internal Bond, Shear.

**Cohesive Failure:** The breakdown of molecular bond by which particles of a body, or bodies, are united. See also: Adhesive Splitting.

**Cohesive Strength:** The internal strength of the adhesive. The measure of a labels resistance to removal. See also: Cohesion, Internal bond, Shear.

**Cold Flow:** The viscous flow of a pressure sensitive adhesive under stress. See also: Adhesive Bleed, Ooze, Flow.

**Cold Temperature Adhesive:** See: Adhesive: Cold Temperature.

**Colorfastness:** The ability of a pressure sensitive label to retain its true color under normal conditions and/or to resist change in color when exposed to light, heat, or other influences.

**Color Separation:** The process of separating a color image into its component primary printing colors.

**Computer Imprintable Labels:** Typically, pre-printed or imprinted utilitarian labels carrying variable information, such as a bar code, price.

**Conditioning:** The process of subjecting a material to specific temperatures and relative humidity conditions for a stipulated period of time. (American Society of Testing Material)

**Conformability:** The ability of a pressure sensitive label to yield to the contours of a curved or textured surface. See also: Flexibility, Pliability.

**Core/Core Size:** Refers to the diameter of the (cardboard) core in a roll of labels.

**Coupon Base:** The clear base in a dry peel label construction. Usually used for instantly redeemable coupons, the clear base is combined with a face material in a specialized laminating process. When the printed face material ( or coupon) is removed, the clear base remains on the substrate. See also: Dry Peel.

**Crazing:** The network of small cracks that can appear in a varnish coat or plastic face material. They are usually caused by expansion and contraction during weathering or by excessive solvents in an ink system. See also: Checking.

**Creep:** The lateral movement of a pressure sensitive label on a surface due to low cohesive strength.

**Cross-Direction:** The direction perpendicular to the machine direction in the plane of a printing material. See also: Cross-Web.

**Cross Web:** See: Cross-Direction.

**CSA:** Canadian Standards Association.

**Curl:** The tendency of paper to bend or warp, either by itself or because of a coating or laminate.

## D

**Deboss:** Condition in which an image is depressed below the normal surface of a material. Embossing has the opposite effect, creating a raised image.

**Declamation:** Following application to a substrate, the separation of a pressure sensitive material into layers in a direction approximately parallel to the surface.

**Decode Rating:** See: Scanability.

**Destructible Label:** See: Tamper-Resistant Label.

**Die:** The tool or device used for imparting or cutting a desired shape, form, or finish from a given material.

**Die Cut:** The actual shape of a pressure sensitive label made by the cutting edge of a die.

**Die Cut Label:** Pressure sensitive labels on a release liner where the matrix, or waste between the labels, usually has been removed.

**Dimensional Stability:** The property of a material which relates to the degree of its ability to retain (or recall) its original shape or state. See also: Memory.

**Direct Thermal printing:** A specialized printing technology that uses rapidly-heated pins that selectively activate a heat-sensitive coating inherent in the face material, thus forming the desired copy or images.

**Dispenser:** A device that feeds pressure sensitive labels, either manually or automatically, in pre-determined units. Dispensers in box form can serve as containers for a roll of labels.

**Dot Matrix Printing:** An economical and versatile method of printing that produces images by printing tiny ink dots closely together. First, a computer sends data which determines the arrangement of pins that are to be fired against a ribbon. These pins are in horizontal and vertical rows on the printing head. As the printing head moves back and forth across the page, the pins fire (many times per second), forming an image. See also: Impact Printing.

**Dots:** See: Print Resolution.

**Double-Coated:** A pressure sensitive product consisting of a face material with similar or dissimilar adhesives applied to both sides of the material.

**d.p.i.:** Dots per inch; a measure referring to dot resolution in images created by dot matrix, laser, and thermal printers and imprinters.

**Duo-Imaging Material:** See: Encapsulated Ink, Self-Imaging Liner, Self-Imaging Piggy back.

**Dry Peel:** A label construction in which two materials are bonded together with a dry adhesive. The top ply of the construction can be removed with no adhesive residue. the bottom ply is typically made of a clear material, so the substrate can be seen through it. A common use of this label construction is for instantly redeemable coupons or for promotions. See also: Coupon Base, Dry Tag.

**Dry Tag:** An uncoated tag face material designed to separate from a liner with no functional adhesive on the tag. Typical uses are clothing tags, temporary I.D. cards, and hang tags. See also: Coupon Base, Dry Peel.

**Dwell/Dwell Time:** (1) The time during which a pressure sensitive material remains on a surface before testing for adhesive permanence or removability. (2) The time during which a hot-stamp, embossing head, or thermal die remains in contact with the surface of a material during printing. See also: Residence Time.

## E

**EDP/Electronic Data Processing:** Data processing by electronic equipment. Pressure sensitive labels produced for imprinting on this equipment incorporate in-line hole punching.

**Edge Lift:** The tendency of the edge of a label to rise off the substrate. This condition occurs most frequently on small diameter, curved substrates. Resistance to edge lift is dependent on the bond strength of the adhesive and the flexibility of the face material.

**Electrostatic Printing:** A method of printing in which the ink is affixed to the face material by electrostatic methods. See also: Ion Deposition Printing, Laser Printing.

**Elmendorf Test:** A standard test for determining the tearing strength of paper.

**Elongation:** The increase in length of a material produced by extending it to the point of rupture. See also: Stretch.

**Emboss/Embossing:** A condition in which an image is pressed into a material to create an image that is raised above the normal level of the material. Debossing creates the opposite effect.

**Emulsion System:** A dispersion of fine particles or globules in another liquid. Many pressure sensitive adhesives are emulsion system adhesives.

**Encapsulated Ink:** Ink encapsulated in a material surface coating which can be activated by heat or

pressure. See also: Duo-Imaging Material, Self-Imaging Liner, Self-Imaging Piggyback.

**English Finish:** See: Calendar Finish.

**Exposure Temperature:** The temperature to which a labeled product is exposed. See: Service Temperature.

## F

**Face Cut Label:** A die cut or square cut label from which the matrix, or waste between labels, has not been removed.

**Face Material/Face Stock:** Any paper, film, fabric, foil, or plastic material suitable for converting into pressure sensitive labels. In a finished construction, the face material is bonded to an adhesive layer and carried on a liner. It is the functional part of the construction.

**Face Split:** A linear cut in face material during coating or converting to meet specialized end use requirements. See also: Split Face.

**Fade/Fading:** A gradual decrease in brilliance of color; often applies to the change in color produced by prolonged exposure to light.

**Fan-Fold/Fan-Folded Labels:** Pressure sensitive labels on a continuous backing that is perforated, then folded back and forth along the perforations, so as to create a flat pack. See: Put-Up.

**FDA/Food and Drug Administration:** FDA regulations for pressure sensitive applications apply to the following areas:

- **Adhesive:**
  1. Direct food contact, such as labeling of raw fruits and vegetables (175.125)
  2. Seam contact where incidental contact between an adhesive and a food may be possible (175.105)
- **Face Material:**
  1. Contact between paper and dry foods (175.180)
  2. Contact between paper and aqueous and/or fatty foods (176.170)

**Feathering:** A defect in printing which is characterized by ragged, uneven, or coarse edges.

**Feed Slots:** Round or rectangular holes punched into the edge of a liner to maintain the register of computer imprintable pressure sensitive labels during imprinting. Holes can be cleanly cut or in a starburst. See also: Pin-Fed Holes, Starburst Holes, Tractor Feed.

**File Card:** Uncoated tag stock frequently used for recording information. A common material for ultimate use as pressure sensitive labels.

**Film:** Plastic face material manufactured from synthetic high molecular weight polymers. Examples are: Kimdura®, polyester, polyethylene, and vinyl.

**Finish:** The surface property of a paper sheet determined by its surface contour and gloss. Terms referring to paper finish include: antique, eggshell, vellum, machine, English, super-calendered, and plate.

**Fish Eyes:** Round or eye-shaped deformations in a coating.

**Flag:** A marker, usually made of strips of colored paper, placed in rolls of pressure sensitive materials during printing (or converting) to designate a deviation from a standard -- such as a splice, defect, or specification



change. It can also mark a specific length.

**Flexibility:** A property of face material, measured under specified conditions, that indicates how readily it will conform to curved surfaces. See also: Conformability, Pliability.

**Flexography:** A rotary web letterpress method of printing characterized by raised-image, flexible rubber plates and fast-drying inks.

**Flow:** See: Adhesive Bleed, Cold Flow, Ooze.

**Fluorescent Paper:** A paper coated with a pigment which reflects light in such a way that it has a glowing appearance or effect.

**Foil:** A thin metal sheet used as a face material.

**Foil Paper Laminate:** A face material consisting of metal foil laminated to paper. The foil usually carries a clear coat to improve ink receptivity.

**Food Contact Adhesives:** Adhesive meeting specified sections of the Food and Drug Administration Code of Federal Regulations. These regulations cover direct food labeling as well as incidental contact. Special product recommendations are necessary for specific applications.

**Four Color Process Printing:** Printing and reproduction of full color images using the four process printing colors -- yellow, cyan, magenta, and black -- to create an image with an infinite number of resultant colors.

**Frozen Edge:** The inability to separate a pressure sensitive label from its liner along one edge. This is generally caused by an absence of silicone on that edge.

**Freezer Grade Adhesive:** See: Adhesive: Cold Temperature.

## G

**Ghosting/Ghosts:** Indistinct image patterns appearing as solids or reverse printing, typically caused by poor ink distribution, inconsistency in plate and/or substrate thickness, and/or poor base ink formulation. See also: Shadows.

**Ghost Printing:** Involves the use of a low-density screen to print a ghost-like background image.

**Glassine®:** A super-calendered, dense transparent or semi-transparent material manufactured primarily from chemical wood pulps, which have been beaten to secure a high degree of density in the stock.

**Gloss:** That property of a surface which causes it to have a mirror-like finish or the ability to spectrally reflect light.

**Gloss Paper:** See: Cast-Coated Paper.

**Gravure Printing:** An intaglio printing process employing minute engraved wells. In general principle, the deeply-etched wells carry more ink than a raised surface, and, therefore, print dark values. Shallow wells print light values. A scraping device, called a doctor blade, wipes excess ink from the cylindrical printing surface before the ink is pressed into the face material. Rotogravure employs etched cylinders and web-fed stock. Sheet-fed gravure, as its name implies, involves individual sheet feeding.

## H



**Halftone:** A method of screening a continuous tone image (like a photograph) for printing or reproduction. The dots in the screen vary in size and density, so as to recreate the complete range of highlights, lowlights, and mid-tones of the original image.

**Heavy Coat Weight:** A higher -than-standard weight of coating per unit area.

**High Gloss Paper:** A cast-coated gloss paper that features high strength material and excellent ink receptivity.

**High Temperature Adhesive:** See: Adhesive: High Temperature.

**Holding Power:** The ability to withstand stress, involving both adhesive and cohesive strength. The term usually refers to rigid label materials on small diameter cylindrical objects.

**Horizontal Spaces:** The horizontal space created by the removed matrix, revealing only the liner in a pressure sensitive label construction.

**Hot Melt Adhesive:** See: Adhesive: Hot Melt.

**Hot Stamping:** An image producing method that involves a film carrying a thin leaf of color which is transferred to a material using heat and pressure. It is commonly used with gold or metallic leaf, but many colors, patterns, and finishes of leaf are available. It is especially popular for labels used in the textile and apparel markets.

## I

**Impact Printing:** A printing method that uses a hammer striking a ribbon to transfer ink onto a material. See also: Dot Matrix Printing, Platen.

**Imprinting:** Technique in which copy is applied to blank or previously printed labels with a secondary printing device such as an imprinter, computer printer, or typewriter.

**Ink Jet Printing:** A non-impact printing process whereby fluid ink is projected from a nozzle directly onto a material to form the desired image.

**Intaglio Printing:** A method of printing in which an engraved or acid-etched printing plate (or cylinder) carries ink to the material surface. The material when pressed against the printing plate, actually squeezes into the inked grooves and, thereby, receives the image.

**Internal Bond:** See: Cohesion, Cohesive Strength, Shear.

**Inverted Face Material:** A face stock that has the adhesive applied to the surface normally printed upon.

**Ion Deposition Printing:** An electronic printing process whereby a static charge is created on a printing cylinder, attracting toner. The toner is subsequently transferred to a printable surface, creating the image. See also: Electrostatic Printing, Laser Printing.

## J

## K

**Knife-Cut Labels:** See: Butt-Cut Labels.

## L

**Label:** The functional portion of a pressure sensitive construction comprised of the face material and adhesive, cut into various shapes.

**Label Height/Label Length:** The vertical measurement on a label (from top to bottom) when the label is traveling in the machine direction.

**Lacquer:** A coating applied to a face material for protection or decoration. Lacquer usually requires ultraviolet curing or drying. See also: Clear Coat, Overcoat, Protective Coating, Top Coat/Top Coating.

**Ladder:** See: Matrix, Skeleton, Waste.

**Laminate:** A web material formed by bonding two or more materials.

**Laser Printing:** Also known as electrophotographic printing, a process where light, generated from either a laser or diode, creates a static charge on a photographically-sensitive cylinder. The charged cylinder attracts toner, which is subsequently transferred to a printable surface, creating an image. See also: Electrostatic Printing, Ion Deposition Printing.

**Latex Paper/Latex-Impregnated Paper:** Paper saturated with latex during its formation making it stronger, more resistant to moisture and abrasion, more flexible, and more durable. See also: Saturated Paper.

**Legging/Legs:** The stringy appearance of adhesive when a pressure sensitive label is separated from a substrate or its release liner. It can also occur when the matrix is removed from a die cut pressure sensitive material.

**Letterpress Printing:** A printing process in which ink is applied to a material from the raised portions of printing plates or from foundry type.

**Life Cycle:** The length of time that a label is to be used before it is ultimately discarded.

**Lift Tab:** A label edge that is not coated with adhesive and , thereby, allows for easy removal of the label from the release liner. It is frequently used for order picking labels.

**Line Art:** Black and white artwork that can be reproduced as is. See also: Camera Ready Art, Mechanical Art, Pasteup.

**Liner:** A paper or film that is a carrier for pressure sensitive labels. Typically, it has a silicone coating to allow easy removal of the label. See also: Backing, Carrier, Release Liner.

**Lithographic Paper:** A paper suitable for lithographic (or offset) printing.

## M

**Machine Direction:** The direction of paper in its forward movement through a paper handling machine or printing press.

**Machine Finish:** See: Calendar Finish.

**Machine Readable:** Refers to the scanning of bar code symbology by a laser scanner or similar device. See also: Scanability.

**Matrix:** The face material and adhesive layers of a pressure sensitive construction surrounding a die cut label which is typically removed after die cutting. See also: Ladder, Skeleton, Waste.

**Matte Litho:** A litho paper with a satin finish -- between high gloss and dull finish -- that is ideal for bar code printing.

**Mechanical Artwork:** See: Camera-Ready Art, Line Art, Pasteup.

**Memory:** The property of a material that causes it to shrink or return to its original dimensions after being distorted, die cut, or subjected to temperature change. For example, vinyl (being very flexible) has more memory than polystyrene. See also dimensional Stability.

**Metallized Film:** A plastic or resinous film that has been coated on one side with a very thin layer of metal.

**Metallized Paper:** Paper that has a thick deposit of metallized particles that resemble a layer of foil. Metallized paper offers reduced stiffness and better flexibility than metallized film and has an appearance similar to laminated foil papers.

**MICR/Magnetic Ink Character Recognition:** The process of reading characters by means of magnetic sensing.

### **Migration:**

1. The movement of one or more of the components of a pressure sensitive adhesive to either a substrate or face material.
2. The movement of one or more of the components of the face material and/or the substrate into the adhesive and/or ink.
3. The uncontrolled spread of ink due to improper printing or curing. See also: Penetration, Plasticizer Migration.

**Moisture Content:** The moisture present in a material. This is particularly important in liners.

**Moisture Equilibrium:** The condition reached by a material when it shows no change in weight, in relation to the amount of moisture absorbed or desorbed by the material.

**Moistureproof:** The property of a material which makes it virtually impervious to moisture. Tyvek® is a moistureproof material.

**Moisture Vapor Transmission:** A measure of the rate of water vapor transmission through a pressure sensitive label.

**Mottled Surface/Mottling:** Non-uniform appearance or coloring of a face material -- blotching.

**Multiple-Web Construction:** A construction consisting of two or more face materials and/or adhesives on the same liner. Example: EDP face material with permanent adhesive and non-pressure sensitive card stock side by side.

**Natural Aging:** The change, if any, in a material occurring from exposure to normal environmental conditions.

## O

**OCR/Optical Character Recognition:** An information processing technology that involves conversion of imprinted or written data to another language and medium.

**Offset/Offsetting:** The partial transference of ink from a freshly printed surface to an adjacent surface -- as that of another sheet of paper.

**Offset Printing:** A printing process in which a right-reading image is printed from a plate onto a blanketed cylinder. This mirror image is then pressed against a printing surface, thus creating the desired, final image. The term offset applies because the printing plate never comes in contact with the printing material as it does in letterpress printing.

**Ooze:** See: Adhesive Bleed, Cold Flow, Flow.

**Opacity:** the measure of the amount of light that can pass through a material.

**Orange Peel:** The mottled or textured appearance of a label that can occur from air bubbles trapped between a laminate and face material.

**Overcoat:** See: Clear Coat, Lacquer, Protective Coating, Top coat/Top Coating, Varnish.

**Overlamine/Overlaminating/Overlamination:** The application of a clear film to label material for the purpose of protection or to enhance visual quality.

## P

**Pasteup:** See: Camera-Ready Art, Line Art, Mechanical Art.

**Pattern Coated Adhesive:** See: Adhesive: Pattern Coated.

**Pattern Gummed Adhesive:** See: Adhesive: Pattern Gummed.

**Patterned Release Coating:** See: Release Coating: Patterned.

**Peel Adhesion:** Peel adhesion is the force required to remove a pressure sensitive label from a standard test surface at a specified angle and speed after the label has been applied according to specified conditions. See also: Adhesive Strength.

**Penetration:** The change in appearance of the face material due to movement of one or more components from the adhesive or the substrate. See also: Migration, Plasticizer Migration.

**Perforation:** Refers to a series of small incisions made in a material to facilitate tearing or folding along a pre-determined line. They are measured in TPI's - ties per inch. See also: TPI/Ties Per Inch.

**Permanency:** The measure of an adhesive's ultimate holding power or bonding strength. A bond that makes label removal difficult or impossible without distorting or destroying the face material.

**Permanent Adhesive:** See: Adhesive: Permanent.

**Pharmaceutical Litho Stock:** A lightweight, uncoated litho stock with the flexibility and high-performance required for pharmaceutical applications.

**Phosphorescent Face Material:** A face material coated with a phosphorescent ink. See: Phosphorescent Ink.

**Phosphorescent Ink:** An ink that absorbs and reflects light and remains luminescent after exposure to a light source has stopped. It is commercially called Glow-in-the-Dark.

**Picket Fence:** A bar code symbology characterized by vertical bars and spaces. See also: Bar code/Bar code Symbol.

**Piggyback:** This type of label consists of a pressure sensitive label on a pressure sensitive liner. This double-ply label is carried on a standard release liner. Once the double-ply is applied to a substrate, the top ply can be removed and applied to yet another substrate. Typically this kind of label is used for response labels in direct mail promotions.

**Pin-Fed Holes:** See: Feed Slots, Starburst Holes, Tractor Feed.

**Plasticizer:** A substance added to polymeric materials to impart flexibility, workability, and elongation.

**Plasticizer Migration:** The movement of plasticizers from a plastic into an adhesive or face material, or both. This can cause degradation of the adhesive and bleed-through of adhesive components into the face material. See also: Migration, Penetration.

**Platen:** The roller which carries paper through a typewriter or dot matrix printer and acts as an anvil for impact printing.

**Pliability:** See: Conformability, Flexibility.

**Polyester:** A strong film that is resistant to moisture, solvents, oils, and chemicals. It is usually transparent, but is available with a metallized finish. Mylar® is a polyester brand name.

**Polyethylene:** A tough, stretchy film that is suitable for use in low temperature applications. It is frequently used for labeling semi-rigid bottles.

**Pressure Sensitive Label:** A self-adhesive label that is the die cut, usable part of pressure sensitive material that has been converted through roll-fed production equipment. The end product can be produced in rolls, sheets, or fan-folded stacks.

**Pressure Sensitive Material/Pressure Sensitive Stock:** The combination of face material, pressure sensitive adhesive and release liner from which pressure sensitive labels are manufactured. Colloquially referred to as a "sandwich".

**Price Mark Labels:** Labels for retail and/or wholesale use that normally carry alpha or numeric character information such as: unit price, lot number, style number, and SKU number. See also: Retail Labels.

**Prime Label/Primary Label:** Usually a descriptive, decorative product label; the label typically on the front of a container.

**Primer:** A coating applied to face material, on the side opposite the printing surface, to improve anchorage of the adhesive and to prevent migration of adhesive components into face material. See also: Anchor Coat, Barrier coat, Sealer Coat, Tie Coat.

**Print Resolution:** The quality of print; the level of detail achieved by a printer. Measured in dpi (dots per inch), typical capabilities are 200 dpi for a thermal transfer printer and 300 dpi for a laser printer. It is particularly critical in bar code printing. See also: Resolution.

**Printout:** Information in sheet form which has been generated by a computer and an automatic printer.

**Protective Coating:** A coating that protects the printing and the surface of a pressure sensitive label for abrasion, sunlight, chemicals (their fumes and dilute solutions), and moisture, or a combination of these. See also: Clear Coat, Lacquer, Overcoat, Top Coat/Top Coating.

**Put-Up:** The final form of converted products -- in rolls, fan-folded stacks, or in bundles.

## Q

**Quick Adhesion:** See: Tack.

## R

**Ream:** A number of sheets of paper, either 480 or 500, according to grade. For purposes of physical testing, a ream is considered as 500 sheets.

**Registration:** The exact, corresponding placement of successively printed images and/or successively die cut pressure sensitive labels.

**Relative Humidity:** The ratio of the amount of moisture in the air at any temperature to the amount required at that temperature to saturate the air.

### **Release/Releasing:**

1. The act of freeing or separating a pressure sensitive label from its liner.
2. The force required to free or separate a pressure sensitive label from its liner.

**Release Coat:** The (silicone) coating on a liner that allows pressure sensitive labels to be easily removed or dispensed.

**Release Coat Transfer:** A defect resulting from the transfer of release coat from the liner to the pressure sensitive adhesive during release.

**Release Coating: Patterned:** Selectively applying release coat beside non-coated areas, in strips that run parallel to the machine direction. This results in a permanent face material/release liner bond in the non-coated areas.

**Release Liner:** The component of the pressure sensitive label material which functions as a carrier for the pressure sensitive label. Usually silicone coated, it readily separates from the label when the label is removed for application. See also: Backing, Carrier, Liner.

**Removability:** A relative term applied to pressure sensitive labels to describe the force or condition under which they can be removed from a substrate. A removable label would be one in which little or no damage occurs to the substrate or the label upon removal.

**Removable Adhesive:** See: Adhesive: Removable.

**Residence Time:** See: Dwell/Dwell time.

**Resolution:** See: Print Resolution.

**Retail Labels:** See: Price Mark Labels.

**Roll Labels:** Pressure sensitive labels that are packaged in continuous roll form. See also: Put-Up.

**Rotogravure Printing:** See: Gravure Printing.

**Rubber Based Adhesive:** See Adhesive: Rubber Based.

## S

**Sandwich:** Colloquial term for the layered construction of pressure sensitive material. See also: Pressure Sensitive Material.

**Saturated Paper:** See: Latex Paper/Latex-Impregnated Paper.

**Scanability:** The quality of a material that allows for precise printing of bar codes, so as to ensure accurate reading or scanning of the bar code data. Readings (called percent decode ratings) are usually measured as a percentage indicating the number of successful scans out of a total of 100. See also: Machine Readable.

**Sealer Coat:** See: Anchor coat, Barrier coat, Primer, Tie Coat.

**Self-Imaging Liner:** A specially-coated, pressure-activated liner that reproduces an exact image of information printed or imprinted on its corresponding face label. Requires an impact printing method. See also: Duo-Imaging Material, Encapsulated Ink, Self-Imaging Piggyback.

**Self-Imaging Piggyback:** A piggy back label material that can be imprinted, creating a duplicate label from the second ply of this double-ply construction. Requires an impact printing method. See also: Duo-Imaging Material, Encapsulated Ink, Piggyback, Self-Imaging Liner.

**Service Temperature:** See: Exposure Temperature.

**Shadows:** See: Ghosting/Ghosts.

**Shear:** See: Cohesion, Cohesive Strength, Internal Bond.

**Sheeted Labels:** Finished labels furnished in cut, singular sheets. This format is most popular for laser printing. See also: Put-Up.

**Shelf Life:** The period of time during which a product can be stored under specified conditions and still remain suitable for use -- normally 6-9 months. See also: Storage Life.

**Skeleton:** See: Ladder, Matrix, Waste.

**Slit Back:** See: Back Slits, Split Back/Split Liner.

**Slit Face:** See: Split Face.

**Smudge Resistance:** The quality or characteristic of a paper (or plastic) to resist the smearing of ink immediately following printing or imprinting; directly related to the absorption level of the paper.

**Solvent Resistance:** The resistance of a material to the action of specific solvents.

**Specific Adhesion:** The force required to remove a pressure sensitive label from a specific substrate under specified conditions.

**Splice:** A method of joining paper or plastic webs within a pressure sensitive roll to produce an operational continuous web.



**Split Face:** Slits in face material of a pressure sensitive product usually for the purpose of facilitating removal. See also: Face split, Slit Face.

**Split Back/Split Liner:** Slits in the release liner of a pressure sensitive label to facilitate its removal by hand. See also: Slit Back, Back Split.

**Starburst Holes:** Pin-feed holes which are characterized by jagged edges. See also: Feed Slots, Pin-Fed Holes, Tractor Feed.

**Static Cling Label:** A label that adheres to a substrate by static electricity -- no adhesive is necessary.

**Step Ladder:** A bar code symbology characterized by horizontal bars and spaces. See also: Bar code/Bar code Symbol, Picket Fence.

**Storage Life:** See: Shelf Life.

**Stretch:** See: Elongation.

**Stub Roll:** A roll of pressure sensitive label stock that is very short in length. See also: Butt Roll.

**Substance/Substance Number:** See: Basis, Basis Weight.

**Substrate:** The surface to which a pressure sensitive label is applied or adhered.

**Sunlight Resistance:** The ability of a material to resist the deteriorating effects of sunlight, especially ultraviolet and infrared wavelengths. Also referred to as being "fast to light."

**Super-Calendered:** See: Calender Finish.

## T

**Tack:** The property of a pressure sensitive label which causes it to adhere to a surface instantly with a minimum of pressure and contact time (as measured by TLMI Tester or equivalent equipment). See also: Quick Adhesion, Touch Tack.

**Tamper-Resistant Label:** A pressure sensitive construction made with a weak face material so that (attempted) removal of the label usually results in its destruction.

**Tear Strength/Tearing Strength:** The force required to tear a label specimen under standardized conditions using an instrument designed to simulate the tearing encountered under general use conditions.

**Tear Tab:** An additional area of face material, next to the release liner of a pressure sensitive label produced in single form to facilitate removal of the release liner.

**Tensile Strength:** The force parallel to the plane of an applied label required to break a given width and length of paper under specified conditions.

**Thermal Transfer Printing:** An imprinting method that uses heat and pressure to melt a wax-based ink onto a label.

**Thickness:** See: Caliper.

**Tie Coat:** See: Anchor Coat, Barrier Coat, Primer.

**Tipped-On Labels:** A method of label application in which the carrier is peeled back and the labels fall or "tip" onto the substrate.

**TLMI/Tag and Label Manufacturers' Institute:** A trade organization of the pressure sensitive label industry.

**Top Coat/Top Coating:** A substance coated onto a label material that will enhance the printing or the appearance of the finished label. For example, some films are top coated to ensure better ink anchorage to the surface of the material. See also: Clear Coat, Lacquer, Overcoat, Protective Coating, Varnish.

**Touch Tack:** See: Quick Adhesion, Tack.

**TPI/Ties Per Inch:** In perforations, the number of material ties that exist between each hole. See also: Perforation.

**Transfer Tape:** A coating of pressure sensitive adhesive applied to a liner that is release-coated on both sides. This allows a user to apply the tape to a surface and remove the liner, leaving only the adhesive on the surface.

**Tractor Feed:** See: Feed Slots, Pin-Fed Holes, Starburst Holes.

**Transparency:** That property of a material which transmits light rays so that objects can be clearly seen through the material.

**Transparent Label:** A pressure sensitive label of which the face material, adhesive, and protective coatings transmit light so that objects can be seen through it.

**Tyvek®:** The brand name of DuPont's imprintable material originally developed for automobile seat belt labels. It is virtually indestructible and highly moisture-resistant.

## U

## V

**Varnish:** A heat-cured coating of one or more materials applied to a face material for protection and/or decoration. See also: Clear Coat, Lacquer, Overcoat, Protective Coating, Top Coat/Top Coating.

**Vegetable Parchment:** A grease-resistant, water-resistant paper resembling animal parchment. It is made by passing unsized paper through sulphuric acid in order to gelatinize its surface; then, it is washed and dried.

## W

**Waste:** See: Ladder, Matrix, Skeleton.

**Water Soluble Adhesive:** See: Adhesive: Water Soluble.

**Weatherability:** The capability of a material to withstand the effects of weather.

**Web:** A continuous sheet of pliable manufactured material.

**Web Width:** The measurement of the web that is perpendicular to the machine direction. Typically refers to the width of the liner or carrier.

**Wrinkling:** The puckering or creasing of a pliable material that can result from environmental conditions and/or manufacturing situations.

X

Y

**Yellowing:** A defect characterized by a gradual color change in the original appearance of white paper; the development of yellowish or brownish hues.

Z