

# Adams Plastics PVC Film Dictionary

## Anti-Static

Anti-static PVC film is a specialized vinyl material designed to prevent static electricity buildup, protecting sensitive electronics and improving safety in industrial environments.

## Calendered PVC Film

Calendered PVC film is a type of polyvinyl chloride film produced by compressing molten PVC through heated rollers, resulting in a smooth, uniform sheet ideal for packaging, signage, and industrial applications.

## Camber

Camber in PVC film refers to the unintentional curvature or deviation from a straight edge along the film's length, often causing handling and processing issues.

## Cold Crack / Low Temp

Cold crack in PVC film refers to the material becoming brittle and cracking when exposed to low temperatures, typically below freezing. This issue can be mitigated by using plasticizers and cold-resistant additives.

## CPSIA

CPSIA is a U.S. federal law that sets strict safety standards for consumer products—especially those intended for children—to reduce risks from hazardous materials like lead and phthalates. CPSIA stands for the Consumer Product Safety Improvement Act.

## Double Polish Clear

A type of flexible PVC film that undergoes a polishing process on both surfaces during calendaring, giving the finished PVC rolls a glass-clear appearance.

## Dusted

Dusting PVC films for ease of handling typically refers to applying a fine powder—often calcium carbonate or talc—to reduce tackiness, prevent blocking, and improve unwind performance.

## Dyne

Dyne level in PVC film refers to the surface energy of the film, measured in dynes/cm, which determines how well inks, adhesives, or coatings will adhere to it. A higher dyne level means better wettability and adhesion.

## Emboss

Embossing is a mechanical or chemical surface treatment where a pattern is imprinted onto the PVC film.



## Expanded

A type of PVC material that is primarily a synthetic replacement for leather-look goods. Expanded PVC is made of multiple layers, including an expanding foam layer, thus the name. It can have a backing of various textiles or no backing at all.

## Extruded PVC Film

Extruded PVC film is a type of polyvinyl chloride film produced by melting PVC resin and forcing it through a die to form a continuous sheet.

## Fire Retardant

PVC film is inherently flame-retardant due to its chlorine content, but additional fire-retardant additives are often used to meet stricter safety standards and reduce smoke generation. Various standards such as NFPA 701 and MVSS 302 are typically used for materials requiring fire ratings.

## Firm

The finish hand or feel of the material. Firm-hand PVC films are typically used for products like stationery and office supplies.

## Frosty

A mechanical or chemical embossing that gives the finished PVC rolls a frosty finish. Very similar to matte.

## Fuzzyback

This type is a PVC film with a non-woven textile backing that has a fuzzy appearance.

## Gauge

The thickness of the finished sheet. Gauge can refer to the measurement in inches or millimeters from one side of the sheet to the other. Gauge typically refers to thousandths of an inch.

## Glass Clear

Glass Clear PVC Film is a high-clarity, flexible polyvinyl chloride film designed to mimic the transparency and smoothness of glass, making it ideal for applications requiring maximum visibility and aesthetic appeal.

## Hand

“Hand” refers to the softness, firmness, or overall pliability of a finished PVC film — essentially, how it feels to the touch. It’s commonly expressed using “H” and “S” ratings: “H” indicates a firmer hand, while “S” denotes a softer one. Because the evaluation of hand involves personal perception, it can vary somewhat between different manufacturers.

## Interleaving

The process of adding another material between the rolled-up layers of PVC films. Interleaving is typically used with softer PVC films to aid in unrolling, handling, and processing.



## Laminated

Laminated PVC film is a multi-layered material made by bonding PVC film to various substrates, including other PVC films, using adhesives or heat, enhancing durability, aesthetics, and functionality.

## Lay Flat

Lay flat in PVC film refers to the film's ability to lie smoothly and evenly on a flat surface without wrinkles, bagginess, or curvature. Poor lay flat affects print registration, lamination, and overall product quality.

## Linear Yard

The measurement of a yard of material based on the width of the material.

## Matte

A mechanical or chemical embossing that gives the finished PVC rolls a matte finish. Very similar to frosty.

## Mil

Similar to thickness, mil typically refers to the thickness of the finished sheet. Mils are often referred to as a number but not always associated with a specific measurement type (e.g., 10 mil could mean 10 gauge or 10 thousandths of an inch).

## MR (Mildew Resistance)

Mildew resistance is a natural property of PVC films due to their non-porous surface and chemical composition. Additives such as antimicrobial agents, fungicides, and surface coatings can enhance mildew resistance.

## Non-Tack

Non-tack PVC films are vinyl films engineered to have low or no surface adhesion, making them ideal for applications where easy handling, repositioning, or clean removal is required.

## Ounces

PVC film is typically measured in mils (thousandths of an inch), microns, or gauge—not ounces. However, ounces may refer to the film's weight per square yard or per roll, depending on context.

## PHR (Parts per Hundred Resin)

PHR is a unit of measurement for the number of additives in a PVC formulation. For most PVC films sold by Adams Plastics, PHR refers to plasticizers used to make the film softer or firmer. The higher the PHR of plasticizers, the softer the film becomes.



## Phthalate Free

Phthalate Free 6P refers to a material — often PVC or other flexible plastics — that is free from six specific phthalates commonly used as plasticizers but restricted due to health and environmental concerns.

## PROP 65

Proposition 65 is a California law that requires businesses to warn consumers about significant exposures to chemicals known to cause cancer, birth defects, or other reproductive harm.

## PVC Film

PVC film is a thin, flexible plastic sheet made from polyvinyl chloride, known for its durability, clarity, and versatility across industries like packaging, construction, and healthcare.

## REACH

REACH is a European Union regulation designed to protect human health and the environment from risks posed by chemicals, while promoting innovation and safety in the chemical industry. REACH stands for Registration, Evaluation, Authorization, and Restriction of Chemicals.

## Rigid

Typically refers to PVC film or sheets that have no plasticizer added, resulting in a rigid or “stiff” sheet.

## Sheeting

A process where master rolls are converted into sheets of material when specific sheet sizes are needed. Sheeting can adjust both the length and width of the master rolls into desired sheet sizes.

## Shrinkage

Shrinkage in PVC film refers to the reduction in dimensions when exposed to heat. It's a critical property for applications like shrink packaging, labeling, and thermoforming.

## Slitting

A roll-to-roll operation to slit a master width of material down to the desired roll width for an application (e.g., a 54” wide roll can be slit into nine 6” rolls).

## Soft

The finish hand or feel of the material. Soft-hand PVC films are typically used for products like bags, enclosures, and roll-up windows.

## Specific Gravity

Specific gravity in plastics is a dimensionless measure that compares the density of a plastic material to the density of water. It helps determine how heavy or light a plastic is relative to water.



## Supported/Unsupported

Supported PVC film includes a backing or reinforcement layer (like fabric or scrim), while unsupported PVC film is pure vinyl without any substrate. The choice depends on durability, flexibility, and application needs.

## Thickness

The measurement of the finished sheet from one side to the other, typically measured in inches or millimeters.

## UV / UVI (Ultraviolet Inhibitors)

Ultraviolet inhibitors are added to PVC formulas to help reduce yellowing, discoloration, loss of tensile strength and flexibility, surface cracking or chalking, and reduced transparency. These effects are especially problematic in outdoor applications like signage, marine enclosures, tents, and industrial curtains.

## Yard Yield

A measurement of how many yards of material are in a pound of that material at a certain thickness and width. For example, a PVC film that is 0.011 inches thick and 54" wide has a yard yield of 1.0, meaning that one linear yard of that film weighs 1 lb.

