

# CREATIVE PVC FILMS TECHNICAL DATA

Creative PVC films are provided in a standard thickness of 2.7 mil (68 microns) and in various widths and lengths.

#### **TYPICAL PROPERTIES**

|                             |       | ASTM           |    |                |              |
|-----------------------------|-------|----------------|----|----------------|--------------|
| <u>Physical Properties</u>  |       | <u>Methods</u> |    | <u>Units</u>   | <u>Value</u> |
| Specific Gravity            |       | D-792          |    |                | 1.35         |
| Tensile Strength            |       | D-882          |    | psi            | 5,100        |
| Elongation                  |       | D-882          |    | %              | 70           |
| Tensile Modulus             |       | D-638          |    | psi            | 360,000      |
| Izod Impact Strength        |       | D-256          |    | ftlb./in.1.10  |              |
| Tear Strength               |       | D-1004         |    | lb./in.        | 500          |
| Water Absorption            | D-570 |                | %  | .04            |              |
| Falling Dart Impact (.010") |       |                |    | inlb., lb./mil | 1.4          |
| Flexural Yield Strength     |       |                |    | psi            | 10,000       |
| Optical                     |       |                |    |                |              |
| Transmittance               |       | D-1003         |    | %              | 89           |
| Haze                        |       | D-1003         |    | %              | 1.9          |
| Thermal                     |       |                |    |                |              |
| Heat Distortion             |       | D-648          |    | °F             | 175          |
|                             |       | D-048          |    | °F             | 290-310      |
| Heat Sealing Range          |       | <br>(III 04)   |    | -              |              |
| Flammability                |       | (UL-94)        |    | Rating<br>°F   | 94 V-0       |
| Thermal Range               |       |                | °F | г<br>170°F     | 35-140°F     |
| Maximum Working Range       |       | D-746          | Г  | °F             | -30          |
| Brittleness Temperature     |       | D-/40          |    | Г              | -30          |
| Electrical                  |       |                |    |                |              |
| Dielectric Strength         |       | D-149          |    | Volts/mil      | 350          |
| Dielectric Constant 60 Hz   |       | D-150          |    |                | 3.2-4.0      |
| L                           |       |                |    |                |              |

#### Chemical

Rigid PVC films are resistant to strong acids, alkalis, most oils, fats and alcohol. In general, aromatic hydrocarbons, ketone, and esters will cause swelling.

## Durability

Mirror Lens, Polychrome Polished Textures, Fantasy Film, Profile, Diamond Plate and Mini Diamond Plate are stock offerings and normally not intended for long-term exterior exposure. In most applications, 9-12 month exterior durability can be expected. Exceptionally harsh UV and wet conditions can shorten

exterior life to less than six months. Interior durability can be considered long-terms for most applications. Prime<sup>TM</sup> versions of Creative offerings are available and the expected life would be in the range of 5 years, where long term durability is desired Prime<sup>TM</sup> is our recommendation.

## Printability

Most decorative techniques require no surface treatment. Screen printing, solvent ink jet, thermal transfer, hot foil stamping, applying other PS adhesives, flexo printing and offset printing are routinely conducted on Creative products as supplied. Water based ink jet is not recommended at this time. As always, it is suggested the decorating technique be tested for suitability.

**MANUFACTURER'S WARRANTY** - This data is based on information we believe to be reliable, representative of *typical values* and is offered in good faith. *Creative assumes no obligation of liability since the use and conditions are beyond our control*. All Creative products are sold with the understanding that all consumers will independently determine the suitability of the material for the purpose for which they were purchased.