



► Cold Weather Installation of Container Marking Film

Decal Marking Films 72A and 67A from Arlon/MII are best applied at temperatures between 10°C (50°F) and 35°C (95°F). Within the center of this range the tack of the adhesive is high enough to attain high instant bond to painted surfaces but not so high that repositioning is difficult. Also the PVC film itself is elastic enough to take the shape of textured surfaces without cracking but not so soft and malleable that stretching and distortion are problems. Preparation techniques for installing decals near to or below 10°C which allow the end-user to mark surfaces throughout the winter season can be found below.

The low temperature substrate installation limit for 67A is 5°C (40°F). As one approaches this temperature film becomes increasingly stiff and adhesive loses more and more tack. In fact when temperatures fall below -5°C there is almost no tack left and decals will not stick at all. At extremely low temperature (air or substrate) the adhesive will not “wet-out” or flow to the paint surface enough to remain in place either when removing the application tape or as a long term decal. Without adding heat at some point during the installation cycle or waiting for a long period between application and application tape removal the decal will lift away and fall off. The heat may be applied to the decal or the container prior to installation or the container between installation and application tape removal. Once the film is successfully applied to the container the service temperatures are -40°C to 93°C.

• Heating Stock

While there are many methods to improve low temperature application success the least effective is to heat the vinyl film. However by using an electric blanket or heating pad placed on top of the stack of decals it is possible to pre-warm the stock right up to the point of installation. If only small improvements in tack level are needed this may be all that is required.

• Heating Container Prior to Installation

Using electric heat lamps stationed one meter away from the work surface (or brushing a soft flame from a propane torch across the work surface) enough heat can be transferred to the container that the temperature will rise 10 to 20 degrees quickly. While the temperature will not remain elevated long it will allow installation and removal of application tape to proceed without delay.

• Heating Graphics After Installation

Passing a heat gun or propane torch over the surface of the applied film while re-squeegeeing will generate enough adhesion to allow application tape removal immediately after the graphics have cooled back to room temperature.

• Using Lower Tack Application Tape

Purchasing application tape with a lighter tack level will reduce the lifting forces on the applied decal and reduce the amount of decal delamination.

• Reducing tack of Application Paper

Just prior to removing application paper lightly spray a water and soap mix (99 to 1) uniformly across the application and 30 seconds for it soak through. Tack of application paper will drop by about 30%.

Allow vinyl a longer dwell time between decal installation and removal of application tape.

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