

# Storage and Cleaning of PVC Films

Instructional Bulletin #1.20 (Revision 6)

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## 1.0 Storage of PVC Films

- Unapplied markings need to be stored in a controlled environment 72° ±5° F (22° ±3° C) and 50 ±5% R.H. free from excessive airborne dust and direct sunlight. The PSA material and/or decal needs to be applied within the shelf life specified for the particular product being used. Rolls in the shipping carton should be stored horizontally; rolls which have been removed from the shipping carton should be suspended horizontally via a rod or pipe through the roll core.

## 2.0 Proper Instructions for Hand Washing Vinyl Graphics

- *The cleaning solution should be a mix of clean water and a mild detergent wash that has a ph range of 3-11.*
- *Always test the cleaning solution on a small section of the graphic before using.*
- *Always read & follow the warning labels and safety precautions provided by the cleaner manufacturer before using.*
- *Mix your mild detergent and clean water to a soapy blend in a cleaning bucket. Make sure your cleaning bucket is clean and free of small debris that could get onto your cleaning rag and scratch your graphic.*
- *Rinse graphic first with clean water from a garden hose sprayer to remove any loose dirt or debris from graphic face.*
- *Begin washing the graphic from the top down to allow dirt and debris to run downward.*
- *Once the graphic has been washed, rinse graphic with clean water using a garden hose with spray nozzle attachment.*
- *Graphic can then be let to air dry or can be dried off by hand with the use of a microfiber cloth.*
- *Once dry, the use of a silicone or Teflon based polish designed specifically for vinyl graphics may be used for added protection. (Be sure to read & follow product manufactures directions and suggestions for frequency of use).*

## 3.0 Using a Pressure Washer to Clean Vinyl Graphics

*The use of a pressure washer to clean vinyl graphics should only be used when all other cleaning methods have been used or tested and did not properly work. Keep in mind that pressure washing could have negative effects on the vinyl graphic including (edge lifting, face degrading over time). Here are some tips to use for this cleaning method:*

- *Use a pressure washer that is no greater than 1200 psi with a water temperature no greater than 120° F (50°C).*
- *Spray nozzle opening should have a 40° angle.*
- *Maintain a minimum spray distance of 18 inches from the end of the spray nozzle to the graphic.*
- *Maintain a 45°sweeping cleaning motion to avoid promotion of edge lifting.*
- *Once graphic has been cleaned and rinsed, allow to air dry or the use of a microfiber rag can be used to dry as well.*

**Special Note: Never use a turbo pressure nozzle when cleaning vinyl graphics.**

#### **4.0 Automatic Truck Washing Equipment**

- *The cleaning solution should have a pH of 3-11. Dilution ratios of the cleaning solutions, as recommended by the manufacturer should be closely followed to reduce/minimize film or ink degradation.*
- *All brushes should be soft and non-abrasive to the inks, and PVC surfaces.*
- *Water temperatures should not exceed 120°F (50°C).*
- *Spray pressure should not exceed 1000 psi (67 bars or 70kg/cm<sup>2</sup>)*
- *Final clean water rinse is necessary.*
- *No cleaner should dwell longer than 60 seconds on the vehicle side.*

#### **5.0 Removal of Difficult Air Pollutants or Debris from Vinyl Graphics**

*When cleaning methods as listed above do not work to remove dirt or debris from the vinyl graphic, try the following:*

- *Spot clean effected area using Isopropyl Alcohol and a clean rag.*
- *Moisten a clean rag with a citrus based cleaner and wipe down effected area. After cleaning, use clean water to rinse area thoroughly.*
- *If these methods do not work, listed below are some recommended cleaners to reference and use which have been tested with successful results.*

**Special Note:** On occasion environmental pollutants or dirt may cause water mark stains that do not remove using standard detergents and water. Seasonal air pollutants vary per geographical area and vinyl graphics can be exposed to air pollutants caused by industrial areas as well. It has been found that the Spartan Graffiti Remover SAC™ listed below works well to remove water spots caused by the air pollutants that mix with seasonal dew. Read & follow manufactures recommended usage instructions before using. Use a clean soft rag to wipe solution off and repeat if necessary to remove stains.

#### **6.0 Protection for Applied Graphics**

*To help protect applied graphics from being damaged by environmental pollutants or seasonal airborne pollutants, we recommend the use of a car wrap polish or wax. The wrap or polish must be petroleum distillate free. Be sure to read and follow all manufacturer instructions for use of the product as well as frequency use of the product. Crystal Tek Wrap Polish™ is a recommended polish that has been tested and approved for gloss finished graphics. For matte finish graphics Swissvax™ Opaque Carnauba Wax For Matte Surfaces has been tested and approved. Both products can be found in our product recommendation section listed below.*

## 7.0 Graphics Do's & Don't's

- **DO** wash the the graphics with a mild soap and clean water.
- **DO** keep pressure wash spray nozzles at least 18 in. away from graphic face when using.
- **DO** test any cleaning solution on small section of the graphic before using
- **DO** read and follow all manufactures directions for proper use of their material as well as safety requirements.
  
- **DON'T** use any aromatic solvents such as acetone, M.E.K, toulene, paint thinner, or lacquer thinner on graphics as these solvents may soften the vinyl and smear ink colors.
- **DON'T** let gasoline or other fuels drip or stay on the graphic for any length of time. If spill occurs, wipe off immediately and rinse with clean water.
- **DON'T** apply any paint or clear coat over the applied graphic.

## 8.0 Recommended Cleaners

Listed below are cleaners from different manufacturers that have been successfully tested and used to remove dirt and debris from vinyl graphics as well as a protectant for the graphics:

*Spartan Chemical Co. Inc.*  
*Biorenewable Graffiti Remover*  
*110 Spartan Dr.*  
*Maumee, OH. 43537*  
[www.spartanchemical.com](http://www.spartanchemical.com)

*Crystal Tek*  
*Wrap Polish*  
*1010 Windward Ridge Pkwy.*  
*Alpharetta, GA 30005*  
[www.crystaltek.com](http://www.crystaltek.com)

*Bayes Cleaners*  
*Bayes Waterless Wash/Detailer*  
*3593 Briggeman Dr.*  
*Los Alamitos, CA 90720*  
[www.bayescleaners.com](http://www.bayescleaners.com)

*Croftgate USA*  
*Aquinel Waterless Car Wash*  
*3546 Emery St.*  
*Los Angeles, CA 90023*  
[www.croftgateusa.com](http://www.croftgateusa.com)

*Swissvax*  
*Opaque Wax*  
*400 Alton Rd.*  
*Miami Beach, FL 33139*  
[www.swissvax.com](http://www.swissvax.com)

*Meguiar's*  
*Meguiar's Quik Detailer Mist & Wipe*  
*17991 Mitchell South*  
*Irvine, CA 92614*  
[www.meguiars.com](http://www.meguiars.com)

**NOTE: The above recommendations and cleaners are intended as a source of information and are given without a guarantee and do not constitute a warranty. Purchasers should independently test cleaning agents and methods, prior to use, to determine their suitability. For additional questions call the Avery Dennison Answerline at 1-800-443-9380.**

***Revisions have been italicized***