



Like dissolves Like

*What you need to know about
tent cleaning best practices*

By Chuck Shipp



The best way to select a general tent cleaner is to select the products that have been developed or approved by the tent manufacturers themselves or products that have been tested specifically for tent fabric.

If you don't pay attention to the cleaner you use, chances are that you may do more harm than good by cleaning a tent. Most tent fabric is a manmade petroleum vinyl sandwiched product, usually consisting of a layer of vinyl, a blockout layer, a layer of scrim (for strength), then the blockout layer and the layer of vinyl again. Since the fabric is petroleum-based, any cleaners that contain petroleum distillates will do it damage. A common saying in the chemical world is "like dissolves like."

Any cleaners that rob the chemical integrity of the vinyl, such as the plasticizers for flexibility, or chemically etch the coatings or the vinyl itself, also are obvious no-nos.

As tents stand erect in the air, the fabric develops a slight static-charged dirt film that is similar to road film on a car. Static holds the dirt on the vinyl, creating an electrolysis film. The cleaner needs to clean through that film without damaging the substrate, which is the vinyl. A ready-

to-use diluted cleaner should be the first thing to touch the dry fabric. This allows the cleaner to penetrate this film and remove it. If you pre-wet the fabric, the water can act as a barrier and prevent the cleaner from emulsifying the dirt film.

There are many methods for cleaning a tent ranging from hands on to using a washing machine. The hands-on method can be as intense as spreading the tent over several 3-ft.-by-8-ft. tables and just spraying and wiping the cleaner as you feed the tent across the tables. Another method is to spread the tent out on a large floor area and simply mop the cleaner on and mop rinse behind that.

You can automate that step by using a floor machine or buffer. These 175-rpm machines will do the scrubbing for you that is often needed as tents age. Use a white pad for newer tents and a red pad for older tents. Use a garden sprayer with a mixture of the cleaner to spray down the tent. Then run the buffer over it in a grid pattern so as not to miss any area. After that process, use a mop bucket and wringer to quickly rinse. Some people use a pressure washer behind the buffer, which is a high water volume rinse usually used outdoors.

➤ Page 64



CLEANING *From Page 62* The next level is to buy a washing machine developed just for tent fabric. Washing machine systems have been criticized for causing vinyl fabric wear. However, it is the consistent choice for large-volume tent cleaning despite the price tag, particularly if you have a large tent inventory.

Tent fabrics encounter certain basic stains, including mildew. Mildew is a microbiological growth that is easily killed and the stain removed with chlorine. However, typical household bleach, sodium hypochlorite, is very corrosive and can damage the vinyl fabric by robbing the plasticizer and dry-rotting the polyester stitching.

A better solution is to use a calcium hypochlorite. Spray the calcium hypochlorite onto the dry fabric and let it sit for up to 20 minutes and all fresh mildew stains will disappear. The main two calcium hypochlorite products available for this purpose are Shipp Chemical's Blitz and X-14, which is sold in most grocery stores. Older mildew stains that have gotten into the fabric may be more stubborn. Use the calcium hypochlorite first. Saturating a towel and laying it over the stain will keep it wet longer.

Mildew-proofing vinyl fabric is another option and cost-effective if you are putting up a tent for a long season or if you have a small inventory of tents and do not want to clean up mildew after the fact with calcium hypochlorite.

Also, using a ultraviolet light usually will eliminate the last of the mildew stains. The ultraviolet light lamp, usually referred to as a carving lamp, removes other stains as well. This process was discovered by Jackie Hendrix of Party Pros USA, Florence, Ala., using a carving lamp for crepe paper and confetti dye stains on white vinyl. Usually allowing the lamp to shine from its normal distance up to 20 minutes will cause the dye stains to disappear. The carving lamp also will fade out old leaf stains.

Leaf stains are mineral deposits left behind as the leaf decays. Acid will take off the surface mineral stains from leaves and not damage the vinyl. Again saturating a towel in the acid then laying on the stain allows it to stay wet longer. Follow up with the carving lamp and the stains will fade out. Acid also may help with severe red clay stains. CLR is available in stores or you can use Shipp's mild acid cleaner. Acid also works well on hard water stains on clear vinyl. Use a weak dilution and wipe over the hard water stains.

A common occurrence is duct tape, tar, asphalt, stickers and even paint on the tent after a rental. Remembering "like dissolves like," all these stains are petroleum-based, so care must be taken. If petroleum is used, the stain is easily removed; however, the residual from the chemical will yellow the vinyl over the next few weeks leaving a permanent yellow



area. Pure orange oil can be used safely on vinyl. Make sure the orange oil product does not contain petroleum distillates. Orange oil used as a pre-spray also will take out candlewax and meat grease stains on linens.

Mr. Clean magic erasers contain melamine. When the sponge is wetted on the end, it will eliminate a large number of unsightly, mystery stains. You may not know what the stains are, however, the magic eraser will take them off. The

erasers are expensive and tedious for large areas, but can work well for removing small stains.

A common problem of gray stains on the side wall from aluminum poles can be unsightly. Tim Cahall, CERP, of The Main Event, Frederick, Md., discovered using liquid silver polish would remove the aluminum dust stain. The chemistry makes sense, since the same product that will remove tarnish on silver will remove the metal dust stain. Cahall says the water-based silver tarnish remover is safer to use.

Remember that tent fabric is an unusual man-made vinyl fabric and much more fragile than it feels. A single scuff across concrete and even carpet can cause a hole. Drop cloths are essential to putting up tents to protect them from the ground.

By following these tips for maintenance and care, tents can last for years, and provide a great return on investment. **RM**

Chuck Shipp has spent 42 years in the cleaning industry. He started Shipp Chemical in 1979 and focuses exclusively on the rental industry and its needs. Shipp Chemical manufactures its own products and has spent an extensive amount of time working with tent fabric manufacturers on products that are safe for vinyl fabric. For more information visit shippcleaningsystems.com.