

So Many Products

Find the One that's Right for You

By Kevin Farrell

Many dealerships and detail departments I visit have so many products sitting on shelves with so much dust on the bottles, you can't read the labels. I see this mostly with buffing products. There are various forms of compounds, polishes, swirl removers, waxes, paint sealants, and some of those "miracle" type products. Many of them have barely or never been used. Why?

I've come across detail shops employing several detailers where each detailer uses a different brand of products. There might also be several other brands that they have tried and are now sitting on that shelf collecting dust. Having numerous products may be problematic for a number of reasons. 1) It's more difficult to train a new detailer on a set of procedures or a system when everybody is using different products. 2) Some cars may turn out looking better or worse than others making it difficult to determine if this is because of the skill of the detailer or the brand of products he is using. 3) Some detailers may complete the job faster than the others do. Again, it is unknown whether this is because of the detailer's skill level or the result of a premium quality product that allows him to do a great job in a shorter period of time.

Some detailers will insist that they have to use a specific brand of product. That is fine if they know why a particular product performs so well. However, if they can't provide a valid answer as to why this product is superior, it may be time for some product training, or implementing a line of products that all the detailers will use. This should help to ensure top performance, and

save the shop money.

Almost every detailer I speak to asks me whose products are the best. There are many great products available that perform well. Some shops may have a supplier that sells one brand over another, so they use that product line by default. Other product lines have a higher visibility and name recognition, so the shop may choose that line. What I do when detailers ask what product to use is this — instead of giving them the name of a product manufacturer, or a particular brand name, I teach them to evaluate products and make a decision for themselves.

Here is how I try to break it down and keep it simple.

PRODUCT CATEGORIES

When you get down to it, there are really only three categories of buffing products. I break them down simply into compounds, polishes, and waxes or paint sealants. In the buffing process, you should only be doing one thing at a time. If you are performing paint correction by means of eliminating scratches, heavy imperfections, oxidized paint, acid rain, or other blemishes, you are compounding the vehicle. If the car is in better condition with light blemishes, swirl marks, or light oxidation, and you want to "spruce it up," you would be polishing the car. After all your correction work is completed and you need to give the car some protection, you would apply wax or paint sealant.

Keep it Simple

You have to break every buffing job down into these three categories. Some cars may not need all

three steps. Some will possibly need multiple steps within each category. For example, a car with deep swirl marks may need a multiple-step procedure to remove them. I would still classify this step as "polishing," but one step in this polishing process will be slightly more aggressive than the following step.

Always determine what the car needs before you begin buffing. This will save time in the long run. Many detailers have "tunnel vision" in the buffing process. They treat each car and every paintjob the same. You must have a game plan. An important step in developing and implementing your game plan is understanding your products and knowing how they will perform.

Formulating Products

I am not a chemist, but I know one of the best in the business. He has taught me many things, including the formulation and characteristics of buffing products. His name is Medhat Badawi of MTI Inc. in Virginia Beach, VA. He has taught me how products are formulated and why they perform the way they do.

By knowing the characteristics and formulation of your buffing products, you will be better able to anticipate their performance. Most products will work, but you want them to work effectively right away and be easy to use. Here's what I learned and how I evaluate products.

Compounding and Ice Hockey

I view compounding today's clear coats as being similar to the way they resurface the ice between periods of a hockey game. The Zamboni machine "shaves" the ice and removes the deep marks and

imperfections made by the skates. Then a thin layer of water is laid down on top of the ice, and the water reflows into the ice. It then refreezes, and you are left with a fresh, perfect surface. Compounding is almost the same. You must level out the scratches and reflow the clear coat to make the paint look like new. Being too aggressive will damage the paint, while being too timid will not accomplish the goal.

Compounding basically “shaves” off a very thin layer of clear coat. The abrasives in the product, combined with the buffer speed and choice of pad, remove the blemishes and imperfections and restore the paint.

Size and Shape of Abrasives

In a compound or polish, the type of abrasive, its size and its shape, and the amount added to the product, will ultimately determine how aggressive the product performs. The larger the abrasive, the more aggressive it will be on the paint

surface. The abrasive particles are measured for size in “microns,” which is a metric unit of measurement. A micron equals one millionth of one meter. Can’t gauge how small that is? Well, an average human hair is 50 microns thick. The particle size in some compounds may be 7 microns, 5 microns, 3 microns, or less. This is why you can rub today’s compounds between your fingers and never feel the abrasives — and why this is no longer the gauge for determining how gritty or coarse a compound is. You will never feel the difference between a 7-micron abrasive and 3-micron abrasive on your fingers.

The particle shape also makes a difference in how aggressive the product is. An abrasive shaped like a diamond or spur with many pointed edges will be far more aggressive than a round or spherical abrasive. Also, even the smallest-size abrasive that has sharp, biting edges can still behave like a harsh compound. So, while size does matter, the shape plays an important role in the aggressiveness of a product. Then there are products that have “diminishing” abrasives, which means they actually break down, diminish in size, and turn more into a polish as passes are made with the buffer.

I have some raw abrasives that I show detail students in my classes. When you open the container and shake some out onto a piece of paper, the abrasives look anything but abrasive. They all look and feel like powder. Even when you pick them up and rub them between your fingers, you will not feel much grit. However, when you take any of these abrasives and rub them onto the paint, they will most certainly scratch and mar the surface.

Don’t let the name of the product or a fancy chart on the label be the only thing that tells you how aggressive a compound is. Ask the product manufacturer, or product distributor, what grade of sand scratch marks the product will

remove. A product advertised to remove 800 grade sand scratches will be more aggressive than a product advertised to remove 1500 grade sand scratches.

When you are ready for the polishing step, the types of products to be used will still contain abrasives, but in a much smaller size and less aggressive shape. A polish still needs to clean, clarify, and level the paint, leaving the true look of a perfect paint finish. Some inferior products will only mask or hide imperfections instead of removing them.

The final step would be a wax or paint sealant. This is for protection only, and will not do much in the way of paint correction. The formulation of a wax and a paint sealant are different, but these products are made to protect the paint surface from atmospheric pollutants.

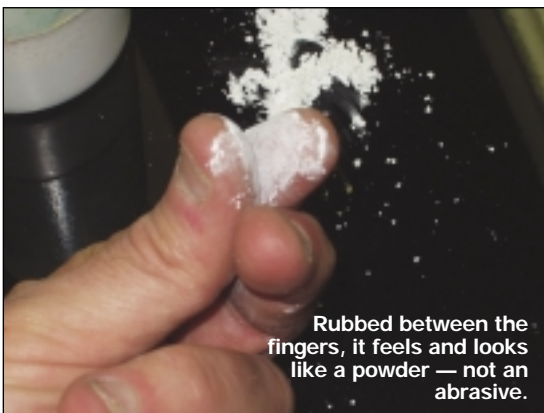
PRODUCT CHARACTERISTICS

Here are some key characteristics of quality products that will help make the buffing process easier and the appearance of the vehicle spectacular. We’ll examine them by product category.

Compounds

Besides wanting to know how aggressive a product is, you want it to perform well and be user-friendly.

- The product needs to perform like it’s advertised. If it’s billed as aggressive, then it needs to get those scratches out fairly quickly and easily.
- However, it should not be super aggressive like the compounds of 20 years ago, which were designed for lacquer and enamel paints. This type of compound can quickly damage today’s paint finishes.
- The product should have a fairly long working time. This is accomplished by using a slow-evaporating solvent. If the product dries too quickly, you end up dry buffing. This can cause abnormal swirling,



Rubbed between the fingers, it feels and looks like a powder — not an abrasive.



Rub the “powder” onto the paint surface of a car and it will scratch the paint as shown by the hazy look in the photo — evidence of its abrasive quality.

hazing, clogging of the pad, and possible burning of the paint. With a slow solvent in the product, you will be able to make many more passes without laying more product down. This will save time, limit splatter and dust, and prevent pad clogging.

- It needs to have very limited dusting. There will be some amount of dust in any compound. The clear coat you are shaving off is one reason for some of the dust you see, and the abrasives and emulsifiers are the other reasons for dusting. If dusting is limited, you will have a much easier time working with the product and cleaning it up.

- The product should leave a great shine. There are compounds that will not only remove scratches, but will leave a very nice gloss after you are finished. This makes the remainder of the buffing steps easier and faster.

- The product should stay where it's put and not dry up. It should not be too watery and run down the side of the car.

- It should leave a limited amount of swirl marks. Most compounds will leave some swirls. However, you want to limit the swirls and the amount of haze in the paint after compounding.

- The product should not clog the buffing pad. If you use foam pads almost exclusively, as I do, you do not want to keep cleaning the pad or changing pads because of too much clogging. Clogged pads will also

cause "buffer bounce" which is annoying and potentially dangerous.

- The product should work with both wool and foam pads. It should keep all the characteristics previously mentioned, but it should perform equally well with a cutting wool or foam-buffing pad.

Polishes

A polish or swirl remover should perform and react in many of the same ways mentioned above. In addition,

- It needs to be aggressive enough to remove swirls and leave a great shine, but not so aggressive that it puts the swirls right back in.

- It has to wipe off easily. After working hard to remove paint imperfections, I do not want to struggle or rub too hard into the paint to get the product off the car.

- The product should work with both a high-speed and orbital buffer. Some products need the friction and heat that a high-speed buffer produces to work. This type of product should work and perform well at slower speeds and with less heat.

- It has to produce a great shine. The car should look awesome after this step is completed.

Waxes/Paint Sealants

The products used for this final step should be capable of being applied with an orbital buffer and spread thinly and evenly. It also needs to easily wipe off the car. It should not dry too quickly or cake up. This should be the quickest step of the buffing process. I don't get too concerned with how long a product will last, or the degree of shine it will provide. If you have properly prepared the paint surface and corrected the paint, it should look like new at this point. Too many detailers get caught up in the question of which brand of wax or paint sealant is the best. If you see a dramatic difference in the finish after applying your wax or paint

sealant, you probably did not do a good enough job in preparing the paint. Concentrate more on the other areas of paint correction and this step will not be a huge area of concern.

KNOW THE PRODUCT

Sounds like a lot to ask of a product? Well there are compounds, polishes, and waxes/paint sealants out there that will perform according to these specifications. You have to know what you want, and demand this type of performance. It may be difficult to find products that will meet all these criteria, but the feedback that detailers can provide to a product manufacturer will go a long way towards improving and perfecting product performance.

Find the best products available and don't worry about price! If it performs the way it is supposed to, pay for it! In the long run, you will save yourself money by not buying similar or cheaper products that don't work the way you like. You will work faster and perform better because of the superiority of the products. If you have any questions regarding buffing products or this discussion, please feel free to call me at (888) 302-6400 or Medhat Badawi at (757) 490-0355.

In an upcoming issue of *Auto Laundry News*, we will talk about how buffing pads can make a big difference in the way products perform and how you can tailor a product to the buffing pad you choose to use. 📧

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Below: A hood after being compounded. It almost looks like it has been waxed — the result of using a good-quality compound.

