

SODA BLAST - Automotive Paint Stripping

1. In the past, the only way you could remove paint or some other unsightly material from a contaminated surface was to chip it, sand it, use harsh chemicals or sand blast it off. Now there is SODA BLASTING. Soda Blasting is a process that can strip almost any surface in an efficient and safe manner. Although it is similar to traditional sandblasting, it has the significant advantage of cleaning the surface without causing harm to the substrate or the environment. Soda Blasting easily removes most paint, coatings, carbon, grease, oils, gasket material and surface corrosion from a variety of metals, alloys, plastics, polyurethane, aluminum, fiberglass and composites without substrate damage or distortion. Soda Blasting leaves hard anodized coatings intact.

Soda blasting is the latest, greenest technology to safely strip paint and/or clean nearly any surface. The Soda Blasting machine uses high volume, high pressure compressed air to deliver bicarbonate of soda-based media (baking soda) onto the surface to be cleaned. Similar in concept to sand blasting, Soda Blasting is much kinder and gentler to the underlying surface and the environment.

Soda Blast media is a water-soluble, food grade non-toxic product, and contains no free silica: it is non-sparking, non-flammable, non-hazardous, and environmentally safe.

2. The blasting process does not generate heat like normal media or sandblasting does. The possibility of warping body panels like sandblasting does not exist.

3. Soda Blasting does not damage glass, rubber, chrome plating or stainless steel trim.

4. Due to its non-abrasive nature, complete operating vehicles can be stripped without damage. Special protection and clean up of electrical components is necessary on operating vehicles. Baking Soda is hydrophilic - it basically loves water. Baking Soda left on electrical connections or components will pull in moisture and cause corrosion. It is a simple clean up - use clean/dry compressed air to blow off any soda residue from components and connections. An average clean-up time for a driving vehicle is around 30 minutes. This is a blasters responsibility to clean up the vehicle and should not be left up to the end user. This is an extremely important step that needs to be completed by a trained professional. That is the reason that The Soda Works Distributors are required to have a training program in place so that procedures like this can be taught to contractors so that these procedures can be completed properly.

5. On vehicles that have been Soda Blasted, the spent media needs to be blown out of areas that can retain the media. If you have enough air power to Soda Blast, you have more than enough air to properly remove excess soda from areas like rocker panels, cowl drainage pillars, frame members, areas between the rear quarters, and trunk pans. Again, this is the blasting contractor's responsibility to perform this task properly.

6. Soda Blasting will remove body filler, most under coatings and seam sealers. There are techniques that are necessary to remove these coatings expediently.

7. Soda Blasting will remove MILD surface rust and flaking/bubbling rust areas down to a point of having hard clean metal, even though it may be rust, it will be clean of loose debris.

8. Contrary to some advertised information, Soda Blasting in general will not remove paint one layer at a time. This depends entirely on the properties of the paint layers being blasted.

Baking Soda is a natural RUST inhibitor. The blasting process leaves an invisible light coating on the metal, kept inside and in a dry location a Soda Blasted vehicle will show no signs of flash rusting for months. The Baking Soda coating on the metal must be removed before any coatings or body filler is applied. Pressure washing is the only recommended process for removing the coating. Lacquer thinner, metal prep, mineral spirits, paint thinner, MEK, and etc. will not work under most circumstances. A water-based solution is the only manner in which the Baking Soda

residue can be dissolved and removed. In the beginning era of Soda Blasting, soap & water or a vinegar & water solution were recommended and used, however this did not always work properly. Many times this allowed an almost immediate flash rusting event and some still experienced paint not adhering in various areas. This was caused by Baking Soda getting packed into areas where two pieces of metal joined, like pinch welds around hoods, deck lids, door skins and etc. and was able to leach out and contaminate the paint area.

One thing to keep in mind after Soda Blasting, high pressure air is used to remove spent baking soda. If completed properly you should find no or very little soda anywhere in the vehicle. However, if any was missed, the pressure washing procedure should remedy that problem. Baking Soda is water soluble and will dissolve and go into solution once mixed with water and it will just wash away, leaving no trace of the soda. This is highly desirable compared to media blasting; you do not have to worry about finding media or sand years down the road, or showing up during the painting process.

With a newer technology like Soda Blasting, it sometime requires new technology to enhance the process. HoldTight Solutions produces a product called Holdtight 102. This is a food grade chemical that you run through your pressure washer to remove the Baking Soda coating left by Soda Blasting. This product will remove all salts, chlorides and contaminants. The company advertises that HoldTight 102 will hold off flash rusting for a period of 48 to 120 hours and will allow up to 70% better adhesion of your coating. We have found that their claims are very accurate. When used properly, we have seen pressure washed metal go for weeks without any signs of flash rusting. Naturally it was kept inside and dry and away from the outside elements. Contractors on the coast of Fl. have reported that the 48 hour window was more accurate there, but it did work and there was no flash rusting.

The pressure washing procedure could be the most important step in prepping your car for paint. No one in the Soda Blasting industry will deny that paint will not stick to metal that has been Soda Blasted. But, just like in mixing and applying paint or body filler, there is a proper procedure that has to be followed in order to make the product work properly. Soda Blasting is no different. Soda Blasting is the most non-invasive way to remove paint and coatings. It will not profile or distort the metal in any way. However, the pressure washing requirements for the removal must be followed in order for the process to work properly. We cannot speak for other manufacturers, but the regional Distributors for The Soda Works have been trained in this process and in turn train all of their contractors accordingly. This knowledge and assistance is available to anyone that contacts us requiring information.

Natrium Products Soda Blast Media (non-abrasive)

1. Food grade product.
2. Natrium is less dusty and more productive than competitor's soda blast media.
3. MOHS hardness 2.4
4. PH 8.4
5. MSDS <http://www.natriumsodablast.com/MSDS/SBMSDS105.pdf>

Soda Blasting Equipment

1. **The Soda Works** is the manufacturer. **Buster Blaster** in the trade name for the patented equipment.
2. The only patented Soda Blasting equipment on the market.
3. With the patented Buster Blaster 100 system, you will get approximately 1 hour of blasting per 50lb bag of Baking Soda using a #5 (5/16) nozzle. With a #4 (1/4) nozzle, you will average about 1 hr. 20 min. per 50 lb bag of Baking Soda. These numbers represent the most production with the least amount of Baking Soda usage in the industry.
4. The owner of The Soda Works, Joe Alexander, designed and assembled the 1st mobile Soda Blasting unit.

5. In order to properly use Baking Soda as a blast media, you have to have cool and extremely dry air. The Soda Works Soda Blasting equipment employs ultra high capacity compressed air cooling/drying systems with all Buster Blaster systems.

Holdtight 102

1. Food grade chemical, environmentally friendly.
2. Changes the surface tension of the water so that it can microscopically remove containments from substrate.
3. Is a flash rust inhibitor and salt remover that kills Chlorides and stops flash rusting in one pass.
4. Allows a minimum of 48 to 120 hour window without flash rusting.
5. Approved by most coating manufactures, check web site for list.
6. Highly recommended for use in the Soda Blasting industry.
7. MSDS <http://www.holdtight.com/product-data/prices-and-msds.html>

New Age Crushed Glass Blast Media (abrasive)

1. 100% recycled glass, benefits environment by reducing landfill waste and eliminates risk of airborne carcinogens.
2. Is an alternative expendable abrasive used for blast cleaning and rust removal.
3. Industrial grade abrasive that can replace more hazardous slag/mineral abrasives.
4. Is chemically non-toxic and inert. Can be used around water.
5. Is silica free and contains no toxic metals.
6. Crushed glass blast media's dust is translucent and allows increased visibility while blasting.
7. Classified by OSHA/NIOSH as nuisance dust.
8. MSDS http://www.novetas.net/images/MSDS_Newageblastmedia.pdf

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