



Frequently Asked Questions

New York Regulatory Change for Solvent Cleaning and Drying

What are the requirements in New York for Solvent Cleaning and Drying? The State of New York's cold cleaning regulations require cleaning solutions to have a maximum volatile organic compound (VOC) content of 25 grams per liter at 20° C and a vapor pressure of 1.0 millimeter mercury (mm Hg) or less measured at 20°C in all cold cleaning degreasers that can hold more than 2 gallons of solvent.

Additional information can be found at the following website address:

<https://govt.westlaw.com/nycrr/Browse/Home/NewYork/NewYorkCodesRulesandRegulations>>Title 6 Department of Environmental Conservation>>Chapter III Air Resources>>Subchapter A. Prevention and Control of Air Contamination and Air Pollution>

What will happen if I don't switch to a compliant solution? We don't know for certain what penalties may be imposed by the state for non-compliance. However, Safety-Kleen will not be able to service parts washers that do not meet the New York Air standards and will be forced to remove any Safety-Kleen owned equipment and solvent from your facility. If you do not switch to a compliant solution, Safety-Kleen will no longer be able to provide you with parts washer service.

Can I use brake sprays or aerosols as an alternative or supplement to my cleaning process? While on the surface, aerosols or brake sprays may seem to be an effective solution for pre-treating or washing parts, the reality is there are hidden costs and potential risks with using these types of cleaners. Brake sprays may seem to be inexpensive when purchased or used by the can and may often be overlooked as cost of materials used by the business, but when you consider the amount needed to clean parts over the course of a month or 12 week service interval, the costs of using these sprays can easily exceed the cost of a typical parts cleaning service. However, the bigger concern with using these types of sprays is that many contain materials such as perchloroethylene (Perc) that are considered to be hazardous. Typical aqueous parts washing wastes are non-hazardous, but introducing one of these sprays could cause your aqueous waste to become hazardous leading to a significant increase in disposal costs, manifesting and reporting, and potentially impacting your waste generator status. If you choose to use these supplements in your parts cleaning process you are required by regulation to notify Safety-Kleen and will likely have to manage parts washer waste as a hazardous waste.

What are the advantages of aqueous based parts washing chemistries? What we've seen from California customers and other businesses across the U.S. who have converted to low VOC solutions is that, due to the high costs of many specialty solvents, most businesses choose a water-based cleaning solution. While there was an appropriate amount of skepticism in the beginning, once customers experienced the advancements made with Safety-Kleen's aqueous solutions, they became very committed to the technology. In fact, most wouldn't switch back if they were given the option. Aqueous based chemistries provide several benefits for customers including:

- **Better for the Environment** - Unlike most traditional solvents, aqueous chemistries contain little to no ozone-depleting VOCs.
- **Safer Work Environment** - Aqueous based solutions are typically non-hazardous and non-flammable, making a safer work environment for your employees while potentially lowering your waste generator status and bringing savings right to your bottom line.
- **Automation** – Aqueous cleaners can be used in more types of automated parts washers such as high-pressure spray or ultrasonics. Depending on the volume of parts cleaned manually each day, automated cleaning can provide time and labor savings while providing a greater level of cleanliness when compared to manual parts washing operations.

Will "water" really clean my parts? Absolutely! Water-based chemistries and parts washer technologies have made vast improvements over the past 20 years, and when used in automated parts washers, aqueous cleaners generally clean as well or better than solvent cleaners. However, it is important to note that the chemistry mixed with the water is what removes the soils, and not the water alone. There are a couple of critical things to understand when cleaning with aqueous chemistries:

- Aqueous chemistries clean differently than typical solvents: Solvents simply dissolve soils while aqueous chemistries use elements called surfactants which attach themselves to the soils and pull soils away from the parts.
- Aqueous chemistries depend on a combination of factors working in balance to achieve optimal cleaning performance--Time, Agitation, Concentration, & Temperature (TACT): Each of these 4 components can vary depending on your specific parts cleaning operation and must be monitored carefully to ensure that you are cleaning your parts safely and effectively.

Safety-Kleen has over 40,000 customers in more than 1,000 different industry applications successfully cleaning with water-based technologies today.



Will using aqueous chemistries rust my parts? If you are cleaning parts in just water or using an aqueous chemistry without a rust inhibitor, your parts will be susceptible to rusting. All Safety-Kleen aqueous chemistries come with an aggressive rust and corrosion inhibitor package that is more than sufficient to protect your parts during the cleaning process. As a note, these rust inhibitors are designed to only protect parts during the cleaning process and are not meant to provide long-term protection for parts storage. For long-term storage, you may need to apply another rust preventative after cleaning.

How do liquid cleaners compare to powdered cleaners? Many powdered cleaners use unnecessary fillers that can lead to increased sediment build-up in your tank. This can result in the need to continually add detergent to the bath to maintain concentration and can cause more accelerated deterioration of the tank. One of the key factors to successful, effective cleaning with aqueous chemistries is to maintain the proper concentration of cleaner in your bath or solution. Safety-Kleen's liquid cleaners make it simple to titrate and maintain the recommended concentrations in your bath, saving you time and money while providing superior cleaning performance.

Is it safe to dump my aqueous solutions down the drain? Be very careful when making decisions on when to dump solutions down your drain. Many companies claim to have a cleaning chemistry that is safe to put down your drain. While in its clean state, the virgin product may very well be non-hazardous or even biodegradable, BUT it's not the solution alone that determines the hazard. Once you begin to clean parts and mix soils in with your cleaning chemistry, it is no longer in its virgin state. Even if the application or soils being introduced are considered to be non-hazardous, the local regulatory agencies have strict guidelines on sampling and testing that you should be aware of before considering any disposal options.

I've heard that using "bugs" or Bioremediation is a good, safe alternative to traditional solvents? Safety-Kleen has done extensive research with bioremediation cleaning technologies, and so far we haven't found or developed one that is versatile or effective enough to cover the vast number of different cleaning applications that exist today. We've found that the microbes or "bugs" are generally only effective at removing light oils in certain controlled applications. Any change or variation in their environment can have an adverse effect, potentially killing the microbes and causing foul odors, loss of cleaning performance, and a continual need to recharge your bath. When we measure this against surfactant-based cleaning chemistries, we find that bioremediation often **costs more** when all costs are considered. Based on our experience with this technology, we can't consider it to be a viable alternative for the majority of parts cleaning applications. Also, be wary of "contact" cleaners that may perform very well in short term trials but experience significant loss of efficacy mid-service term. All of Safety-Kleen's aqueous chemistries are specifically designed to maintain efficacy over an entire service cycle, for maximum and sustained performance.

Are there any solvent options if I want to continue using solvent cleaners? Certain specialty solvents like Safety-Kleen's Q-Sol have been exempted and approved for use to meet these VOC regulations. While these types of specialty solvents can be expensive, we have a unique set of solutions available to help offset the associated higher costs through Onsite Solvent Recycling. Safety-Kleen's onsite solvent recycling systems provide several key benefits including:

- **Cleaner Solvent** - Without recycling, solvent gets dirtier and dirtier the more it's used. But when you recycle solvent on-site, it's consistently cleaner, and with cleaner solvent, operators can clean parts faster while avoiding the incidence of errors and costly mistakes.
- **Waste Reduction** - By recycling solvent on-site, you can reduce the amount of solvent waste generated, creating an opportunity for you to possibly reduce your generator status and associated requirements.
- **Improved Sustainability** - Not only is cleaning and productivity improved, but your company's practices become more sustainable (compared to traditional parts washing), producing less greenhouse gas emissions and reducing your impact on the environment.