

AQUEOUS PARTS WASHER



Thurston County Business Pollution Prevention Program

☎ 360-867-2664

👂 TDD: 360-867-2603



WHAT'S WRONG WITH PETROLEUM SOLVENTS?

Mineral spirits and chlorinated solvents, commonly found in brake cleaners, are used for parts cleaning because of their ability to quickly dissolve oil, grease, and carbon. Although these solvents are very effective, their use raises significant environmental, health, and economic concerns:

- ◆ Chlorinated solvents can contaminate used oil, resulting in costly disposal.
- ◆ Petroleum and chlorinated solvents contain toxic chemicals.
- ◆ Petroleum solvents evaporate quickly which increases exposures to these toxic chemicals.
- ◆ Solvent cleaning units are often the largest source of a facility's hazardous waste.
- ◆ Some solvents leave an oily residue, requiring additional cleaning prior to finishing.

TYPES OF AQUEOUS CLEANING UNITS

There are several types of aqueous cleaning units: Spray cabinets, ultrasonic cabinets, immersion units, and drum top units. There are advantages and disadvantages to each type of aqueous cleaning units. Work with your vendor to determine what unit is best for your shop needs.

MANAGING AQUEOUS CLEANING WASTES

Since aqueous waste is typically less toxic than petroleum solvents, waste management is often easier and less expensive. How you manage your spent aqueous waste depends on the type of cleaning solution, equipment, and the wastewater disposal system at your facility (i.e. onsite septic or municipal sewer system). *It is illegal to dispose of any parts washer solution into drywells, onsite septic systems, storm drains, or onto the ground.* For additional information on best management of your spent aqueous washer waste, contact the Thurston County Business Pollution Prevention Program.

MAXIMIZING AQUEOUS SOLUTION LIFE

With proper management, aqueous cleaning solutions can last longer than petroleum solvents. Extending the life of an aqueous solution will save you money by reducing your chemical purchase and waste disposal costs. Doing the following will help maximize the life of your aqueous solutions.

- ◆ Filter the solution: Typically, cartridge filters are used to remove solids as small as a few microns.
- ◆ Perform oil skimming: Oil skimmers remove free-floating oil from the solution, reducing the amount of oil residuals left on parts and significantly extending solution life.
- ◆ Change solution only when necessary: Change the solution only when the cleaning effectiveness declines. Do not change solutions on a scheduled "need it or not" basis.
- ◆ Maintain solution concentration: Perform chemical additions as needed to maintain the cleaning strength of the solution. Some vendors may offer easy-to-use test kits to measure the concentration and determine when chemical additions are necessary.
- ◆ Accept solution discoloration: Many aqueous solutions turn gray or brown during use, but this discoloration does not affect its cleaning ability. Do not change cleaning solution simply because it looks dirty.

For questions on small business hazardous waste, contact the Thurston County Business Pollution Prevention Program at (360) 867-2664, during regular business hours or TDD (360) 867-2603 or email PHSSPollutionPrevention@co.thurston.wa.us.

Visit Thurston County for more information: www.co.thurston.wa.us/health/ehhw/index.html

In partnership with:

