



# Dental Instrument Cleaner Use

A Pollution Prevention Perspective



A survey of ultrasonic dental instrument cleaners used in the San Francisco area was conducted. This survey was part of a cooperative project sponsored by CA Dental Association, local dental societies, city agencies, and the US Environmental Protection Agency.



## WHAT WE FOUND

- Enzymes are by far the most common ingredient in ultrasonic baths.
- Dental assistants typically clean used instruments either daily or more often depending upon the office's instrument inventory, number of patients seen, and how much time is needed to process cleaned instruments through the sterilizer.
- On average the survey respondents use 85 grams per day of ultrasonic bath cleaner products per dentist. This weight excludes water that a dental assistant adds when mixing the product.
- These ultrasonic bath cleaners contain an average 25 grams per day of hazardous ingredients per dentist. The range in such ingredients is from zero (enzyme products) to 400 grams per day.

## WHAT WE RECOMMEND

These responses give us clues on how dental practices can reduce their ultrasonic bath chemical use. Three primary strategies are:

- Consider enzyme based cleaners for this task. About 70% of the survey respondents use this approach.
- Evaluate the active ingredients and other chemicals in your bath solution. Choose products that are least toxic yet are still able to accomplish the intended purpose. For example, one should not use high-level sterilants such as glutaraldehyde in an ultrasonic bath.
- If you choose to use a disinfectant product in the ultrasonic bath, mix it according to manufacturer instructions. Adding too little water does produce a stronger solution, but that extra strength is usually not needed.

## MORE INFORMATION

Visit the Dental P2 Project website for additional information

<http://www.wrppn.org/dental>

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