



Dental Vacuum System Cleaners

A Pollution Prevention Perspective



A survey of dental vacuum system cleaners and disinfectants 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

- Alcohols, phosphoric acid, and enzymes are the most common active ingredients in vacuum line cleaners and disinfectants.
- Dental assistants typically clean or disinfect vacuum lines either daily or weekly depending more upon office protocols than number of patients seen.
- On average the survey respondents use 40 grams per day of vacuum line cleaner or disinfectant products per dentist. This weight excludes water that a dental assistant may add to mix the product.
- These line cleaners contain 5 grams per day per dentist of ingredients that are a potential hazard to the user, patients, or the environment in general.

WHAT WE RECOMMEND

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

- Consider enzyme based cleaners (15% of surveyed offices use this type).
- Evaluate active ingredients and other chemicals in your products. Choose the least toxic ingredients needed to accomplish the intended purpose. Do not use bleach, formaldehyde, or glutaraldehyde products for vacuum line disinfection.
- Mix products according to manufacturer instructions. Adding too little water does produce a stronger solution, but that strength is usually not needed.

These alternatives decrease patient and staff exposure to chemical hazards, and also reduce the environmental impact of dentistry.

MORE INFORMATION

Visit the Dental P2 Project website for additional information

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

FUNDED BY A GRANT FROM THE US EPA REGION 9

For more information please visit SFEnvironment.org or call (415)355-3700.

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