



Technical Bulletin: Good Vibrations™ Ultrasonic Cleaner Solution - Improved Efficacy Claims

Certol International LLC maintains a continuous quality review process for all products and formulations. Good Vibrations, a product designed for cleaning dental and medical instrumentation was recently reviewed for improvements in performance based on several factors:

1. Manufacturers must constantly monitor the sourcing for raw goods in formulations. Recently Certol was notified that a surfactant detergent component used in the Good Vibrations formula would no longer be available.
2. Dental offices using Good Vibrations sometimes comment that the product becomes cloudy under certain water conditions even when freshly mixed.
3. Some dental practices, especially orthodontic groups, may abuse cleaning solutions by running the ultrasonic device continuously thus over-heating the solution.
4. Instrument manufacturers publish instructions for use and cleaning. Excerpts from two manufacturers illustrate the trend to recommend neutral pH cleaners as the safest chemistry for the cleaning process. (Chemical pH is rated at 1.0 extremely acidic to 14.0 very alkaline with 7.0 to 9.0 generally considered neutral.)

Hu-Friedy instrument cleaning instructions:

“3.7 Material resistance

Detergents or disinfectants containing the following substances must not be used:

- strong alkalines (> pH 9)
- strong acids (< pH 4)”

Premier instrument cleaning instructions:

“-#3) Proper Solutions: Do use Ph balanced cleaners”

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As part of on-going quality assurance efforts, Certol prioritized laboratory analysis on the Good Vibrations™ formulation with the following goals:

1. Source an appropriate surfactant that will work effectively with other components of the Good Vibrations formula.
2. Develop a formulation closer to pH neutral (generally defined as 7.0 to 9.5 pH) tested for compatibility with aluminum, stainless steel and carbon steel.
3. Maintain current desired features such as low/no foam to support ultrasonic cleaning action, highly effective anti-corrosive agents desirable for instruments and burs having high carbon steel components and economical yet robust cleaning action.
4. Develop a formula with improved cloud point when used with hard or cold water.
5. Formulation will work effectively with no adverse effects even when solutions become superheated (140 degrees F).

Based on extensive laboratory testing, Certol International LLC validates the Material Qualifications and effective use of Good Vibrations Ultrasonic Cleaner Solution with the specifications listed on the product Safety Data Sheet, current product label and literature:

- Liquid concentrate.
- Green color.
- Diluted at one ounce per gallon of water.
- Neutral pH (8.5 to 9.5 concentrated solution).
- Biodegradable and contains no phosphates.
- Anti-corrosive agents.
- Non-foaming.
- May be used at temperature range from 68 degrees F (room temp.) to 140 degrees F.
- Tested and safe for use on anodized aluminum, carbon steel, stainless steel.