

## Vacuum Line Cleaning Solution pH and Hg5® Filter Performance

According to the American Dental Association (ADA) and regulators requiring Amalgam Separators, oxidizing line cleaners should not be used. Oxidizing cleaners can breakdown amalgam particles. Cleaners containing bleach (chlorine bleach, sodium hypochlorite) should never be used as chlorine is known to cause mercury to be released from amalgam.

Regulators have also become aware of pH related to line cleaners. Sewage treatment plants require discharges from their users to be between 5.5 and 10 on a pH scale. Some new amalgam separator regulations now require the use of line cleaners with neutral pH. Acidic (low pH) line cleaners have been known to hinder the operation of Amalgam Separators. Basic (high pH) cleaners can cause premature wear on materials used in amalgam separators

### Recommendations:

SolmeteX recommends the use of vacuum line cleaners that have a pH between 6 and 10. There are several cleaners with a pH near neutral (pH 7). Most of these rely on enzymatic processes. Below is a list of readily available cleaners that have pH ranges most compatible with the Hg5®. If the line cleaner you are currently using is not on the list feel free to contact SolmeteX for further information.

NAME	MANUFACTURER	pH (a, b)	
PureVac HG	Sultan	8	Recommended
Accu-Vac Plus	Enzyme Industries	7	Approved
BioVac	Micrylium	8.5	Approved
Citrizyme	Pascal Company	7.7	Approved
CleanStream	Air Techniques	8.8	Approved
Denta-Zyme	Ecolab, Inc	6-8	Approved
EmPower	Metrex	6.5 to 8.6	Approved
Enzymax	Hu-Friedy	7	Approved
FRESH-VAC	Ecolab, Inc/Huntington	6.5 to 8.0	Approved
Maxizyme	Henry Schein	6.5-8.6	Approved
Microvac	Microbex	8.6	Approved
Neutravac	Biotrol	7.0-8.0	Approved
PD Care Dual Enzyme Detergent	Patterson	6.5-8.6	Approved
Perfection Plus	Perfection Plus Group	7	Approved
ProEZ	Cetrol International	7	Approved
SlugBuster	RAMVAC	8.5	Approved
Sani-Soak Ultra	Enzyme Industries	8	Approved
VacuCleanse Evacuation	Infection Control Tech	7.7	Approved

a) The pH data is taken from manufacturer MSDS, communication with the manufacturer or measurement by SolmeteX.

b) The Massachusetts Department of Environmental Protection requires the use of line cleaners with pH between 6.5 and 9.