

Vacuum Line Cleaning Solution pH and Hg5® 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 SC	Sultan	9.4	Recommended
BioVac	Micrylium	8.5	Approved
Bio-Pure eVacuation System Cleaner	Bio-Pure Products	6.6 – 7.4	Approved
BLAST	Preferred Dist., Inc.	6 – 7	Approved
Citrizyme	Pascal Company	7.7	Approved
EmPower	Metrex	6.5 – 8.6	Approved
Enzymax	Hu-Friedy	8.5 - 9	Approved
FRESH-VAC	Ecolab, Inc/Huntington	6.5 – 8	Approved
Hayes Evacuation Cleaner	Hayes Hendpiece	7.5	Approved
Medical Enzyme Detergent	Enzyme Solutions	6.5 – 7	Approved
Microvac	Microbex	9 – 10	Approved
Neutravac	Biotrol	7 – 8	Approved
Precision Clense Plus	Midmark	9 – 10	Approved
ProEZ	Cetrol Internation	7.4 – 8.3	Approved
Quala	Enzyme Industries	7.3 – 9.3	Approved
Sani-Soak Ultra	Enzyme Industries	8.5	Approved
SRG Evacuation Line Cleaner	Mydent International	6.4	Approved
Super Vac 40 Plus	EPR Industries	7 – 7.5	Approved
VacuCleanse Evacuation	Infection Control Tech	7.1	Approved

a) The pH data is taken from manufacturer MSDS sheets.

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