



Green Carpet Cleaning Chemicals

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Feature

The history, evolution and health benefits of using such products warrant noting.

CM/Spotlight: Carpet Care

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The professional cleaning industry goes back centuries. In fact, the word janitor derives from the Latin word janus, used in ancient Rome to refer to a doorkeeper or building caretaker.

The professional carpet cleaning industry, however, is a rather new industry by comparison.

Before World War II, most homes were built with hard surface floors, usually hardwood.

People placed rugs over these floors and, when those rugs needed cleaning, they were either "beaten" with specially made rug beaters or taken to a company that specialized in this service to remove dust and gently clean them with soap and water to remove soils.

In the late 1940s, wall-to-wall carpeting became the norm in most homes.

At first, shampoo and bonnet cleaning systems, which used a floor buffer and special pads to clean carpets, were the most common way to clean these carpets.

At about this same time, the carpet cleaning steamer — what we now refer to as a carpet extractor — had been invented.

By the 1960s, steam cleaning carpets with extractors, both truckmounted and portable, with or without in-line heaters, had become very popular.

Shampooing is still the most common method used to clean carpets, especially in commercial settings.

This is mainly because it does not require the purchase of special and often expensive equipment, it is fairly easy to do and it allows carpets to dry relatively quickly.

However, carpet extraction is becoming the most popular way to clean carpets.

The Chemical Component

Just as carpet cleaning practices and equipment evolved throughout the previous century, so, too, have carpet cleaning chemicals.

Before the twentieth century, soap and water were just about the only things used to clean everything from counter tops to carpets.

Some say it was the development of washing machines in the 1900s that led to the development of the first real cleaning agents and detergents.

Researchers found that certain chemical ingredients and combinations of ingredients provided more effective cleaning and, as a result, a new and important industry — cleaning chemical manufacturing and development — came to be.

This fledgling industry was given a big boost at about the same time when public health experts discovered a direct correlation between inadequate cleaning and the spread of disease.

Cleaning chemicals created specifically for shampoo and bonnet systems were developed as those machines increased in popularity, as did those used in carpet extraction systems.

Although these chemicals have become more effective over time and have certainly served us well, we now know that they can be harmful to the environment, building occupants and the cleaning professionals who use them.

Most of the conventional carpet cleaning chemicals still in use today contain such ingredients as:

- d'limonene
- 2-Butoxyethanol
- Volatile organic compounds (VOCs)
- Chemical solvents and odor eliminators.

Exposure to these ingredients can cause a variety of health-related problems ranging from dizziness to cancer.

These problems are sometimes intensified because the chemicals are not always used properly — typically because users do not understand how dangerous they can be.

Often, too much chemical is used, adequate protections regarding mixing and pouring are not adhered to or there is inadequate ventilation when and where carpet cleaning chemicals are mixed and used.

The Green Savior

Over the last 15 years, chemical manufacturers have developed a variety of carpet cleaning agents that are healthier to use.

However, as with other green chemicals, early versions tended to be costly, did not perform as well as conventional products and might not even have been as green as they claimed to be.

The work and research for safer, more sustainable carpet cleaning solutions by pioneers in the chemical manufacturing industry led the way in the improvement and acceptance of environmentally preferable carpet cleaning products.

Very often, this work was done by smaller chemical manufacturers while the major companies sat on the sideline, waiting to see if this "green thing" would become more than just a fad.

As green carpet cleaning began to become more mainstream, more manufacturers — both large and small — developed products and even entire product lines designed to reduce the impact of carpet cleaning chemicals on the environment.

Bio-enzymatic carpet cleaning chemicals, which use natural ingredients such as enzymes and even bacteria to consume soils and other contaminants before breaking down into carbon dioxide and water after use, have become much more popular as well due to both their effectiveness and their minimal environmental impact.

The green carpet cleaning movement received another important boost when parameters and certification criteria were developed by such organizations as TerraChoice Environmental Marketing's EcoLogo Program, Green Seal Inc. and the Carpet and Rug Institute (CRI).

Although proven-green carpet cleaning chemicals contain none of the ingredients we now know to be harmful, these products must still be used properly per the manufacturer's instructions in order to protect human health and the environment.

The way chemicals are now applied to carpets, at least with the extraction method, also can make the process more environmentally responsible.

For many years, technicians mixed cleaning agents and water in the extractor's tank.

Dilution was not always scientifically preformed and, more often than not, more chemical — potentially having a greater impact on the environment — was used than necessary.

However, most technicians now pre-spray carpets with cleaning agents, working in one manageable area at a time.

This allows the chemicals to "dwell" on the carpet, helping to dissolve and loosen soils.

This method is also greener because it typically requires less chemical, reducing the environmental impact.

A Bright Future

As many individuals in the cleaning industry now know, green cleaning is a journey: We are constantly developing new cleaning methods, products, chemicals and equipment that make cleaning healthier for users, building occupants and the environment.

Carpet cleaning is no exception — the green carpet cleaning chemicals now available make yesterday's products look primitive by comparison.

If the past is any indication of the future, we can look forward to even more improvements in the years to come.

Mark Warner is the current president of the Low-moisture Carpet Cleaning Association (LMCCA), a position he has enjoyed since 2006, having been re-elected in 2008. Professionally, he holds several positions for Enviro-Solutions Ltd., a green cleaning solutions manufacturer located in Peterborough, Ontario. Warner is the product manager for disinfectants and sanitizers, director of training and Mid-Atlantic region sales manager. Additionally, he is active in the ISSA and is certified as a Cleaning Industry Management Standard (CIMS) Expert.