

Carpet Cleaning Guide

Carpet Cleaning 101: An Overview

Step One: Identify Carpet

Fiber Type	Composition
Cotton	Cellulosic – Cotton Seed, Jute
Wool, Silk	Protein Based- from animals
Nylon	1) Single chain polymer, can accept dyes; can fade. 2) Double chain polymer, does not accept dyes as readily but also is stain resistant
Olefin	Polypropylene, which is the least absorbent material used to make carpets
Polyester	Looks similar to nylon
Acrylic	Synthetic wool; used in some Berber carpets
Synthetic	(Nylon, Olefin, Polyester & Acrylic)

Identify the carpet type,
backing & weave

Vacuum properly & identify any problem areas.

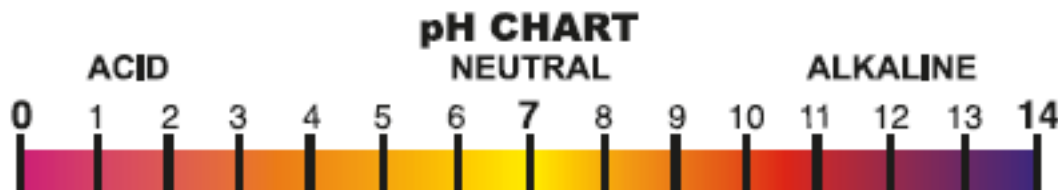
Spot clean obvious stains with a specialty spotter.

Natural wool, silk or cotton carpets need special attention, low moisture. Test for colorfastness.

Synthetic carpets are cleaned in many of the same ways; however, they are abrasive sensitive

Step Two: Observation

Step Three: Chemistry of Cleaning



Soaps, Detergents & pH

ACID – Bitter or sour tasting, unites with alkali to form salt. Acid has pH value less than 7. Substances that are acidic include citris, acetic, formic, oxalic, and hydrofluoric acid.

ALKALI – Bitter tasting substances that neutralize acids and form salts. Alkalis have a pH value above 7. Substances that are alkali include sodium hydroxide, sodium metasilicate, trisodium phosphate, sodium tripolyphosphate (ingredients in cleaners).

DETERGENT – A single or combination of substances that act as a soap. Subcategories

- Anionic** – with the electrons in water, ionizes negatively.

- Cationic** – through the loss of electrons in water, ionizes positively.

- Nonionic** – neither positively or negatively charges ions in solution; therefore, it can be mixed with a variety of chemicals that might be incompatible in anionic or cationic solutions.

- Emulsification** – the function of a detergent in breaking down oil-based materials and uniformly suspending them to form tiny droplets.

- Emulsion** – a colloidal dispersion of oil in water. A uniform mixture of liquids that do not actually dissolve within the other. In the emulsion, one liquid contains a tiny drop of the other evenly distributed throughout. Often liquids turn white – milk is butter fat emulsified in water. Co-solvents are emulsified in detergent solution and oil soils are emulsified in cleaning solutions.

HYDROPHOBIC – the tendency of one end of a detergent molecule to be attracted to non-water surfaces.

SOAP – the combination of natural oils (animal or vegetable) with sodium hydroxide (lye) or potassium hydroxide, which results in a new chemical compound used for cleaning.

SURFACTANT – Surface active agent that enables a solution to penetrate fabric through wetting, to suspend oils through emulsification, and to suspend particle soil by forming micelles (particles of soil surrounded by soap or detergent molecules).

WETTING – one function of a detergent (surfactant) in reducing the surface tension of water, distributing cleaners throughout the fabric that is being cleaned.

If a stain pH can be determined, then the pH of the cleaning agent should be the opposite – that is, acid cleans alkali and alkali cleans acid.



The professional's arsenal for carpet cleaning should include

White blotting towels/microfiber cloths

Stain spatula tool

pH test kit

Specialty Spotters – specific products for specific stains, such as gum/adhesive remover (solvent), rust and tannin removers, enzyme activated spotters, and at least one neutral pH spotter that can attack most stains.

Carpet Care Systems

Pre-conditioner (suspends soil quickly) and maximizes cleaning efforts.

Extraction Detergent rinse the suspended soils and pre-conditioner from the carpet and deep cleans areas that have not been preconditioned. Alkaline based for commercial and synthetic fibers and acid or neutral for natural fibers.

Encapsulating Polymer Shampoo – prevents resoiling

Bonnet Buffing – fast drying, low residue solution used with a ‘bonnet’ machine and agitation.

Shampoo – formulas with crystallizing agents (an evaporating agent that lifts dirt)

De-foamer – low moisture method that also crystallizes

Deodorizer – eliminates odors from the source; fragrance can reinforce the impression of ‘clean’

Browning Treatment – if wicking occurs, apply this treatment to remove the reappearing stain

- Know the Fiber and Carpet Backing Materials
- Provide the Customer with a REALISTIC Cleaning Assessment
- Use Mats Whenever Possible for Entry and Hallways (Between Cleanings)
- Be Prepared – Replenish Items in Carpet Cleaning Kit Before Tackling the Job
- Check for Spots
- Precondition High Traffic Areas
- Follow Manufacturer's Product Directions
- Don't Over Saturate Carpet
- Factor In Enough Time to Complete the Job
- Use Fans to Hasten Drying
- Keep Traffic Off Until All Areas are Dry
- Vacuum Regularly – Nothing Takes Its Place!

