

HOW TO CLEAN WITH LST



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It is necessary to establish initially, that LST is not a miracle cleaner or the one cleaner for all tasks. At the same time, LST continues to amaze everyone in its performance on a wide variety of problems. Its concept is new and revolutionary. While Ed York encouraged, produced, tested and adapted it to different procedures, Keith Williams (carpet pathologist with his own firm, Williams & Williams Lab, as well as technical consultant with Society of Cleaning Technicians, and west coast Dean of Education for Fiber Cleaning Schools of America), deserves all the credit for its discovery and formulation.

This manual will give detailed instructions on how to apply LST in several cleaning situations. Realizing that new uses are being discovered continually, we submit this, with the idea that the uses given are just the start of those yet to come.

In order to eliminate repetition of the descriptions of some methods and terms used in the various procedures, certain explanations follow.

VACUUM: As complete a coverage as possible.

- A. UPHOLSTERY, TAPESTRY, WALLCOVERING, DRAPERY: A wet/dry canister type is preferable, with at least 85" of water lift and good over flow with a 1 ¼ inch or more vacuum hose.
- B. CARPET: (a) A low level loop commercial style construction, a revolving brush, power head or upright vacuum. When using an upright vacuum cleaner, a top loader is strongly recommended.
(b) Plush, twisted cut pile, and #8 or less denier yarn should not be subjected to a mechanical brush.
- C. VACUUM STROKES: Should be completed in all four directions. If excessive sand is at the base of the tuft, a groomer brush should be used following four-way vacuuming; vacuuming should be completed one more time, from all directions.

GROOMING:

- A. Use a groomer brush or rake to lift nap and dislodge deep seated dry soil particles.
- B. Use a groomer brush or rake to work LST into carpet fiber.
- C. Use a groomer brush or rake to lift carpet nap after cleaning or wetting out.

SPRAY:

- A. MIST: Fine spray.
- B. CONE PATTERN: Applies chemical in a circular coverage.
- C. LINE PATTERN: Applies chemical in a straight line.
- D. TIP SIZE: Size of hole in tip - 04 or 06 is recommended.

LST PAD: White cotton absorbent towel-like pad. Thicker construction like a bath mat rather than a towel gives best results; sizes vary from 12" to 15" by 15" to 20". 32 oz. or greater construction preferred.

RECOMMENDED PROCEDURES

SPOTTING:

Mix 1½ to 2 ounces of LST with one quart of warm water. Place water in a pan or preferably a 5 gallon, clean white plastic bucket. Immerse a clean LST pad and soak until saturated. Wring out excess water, leaving some moisture, but not enough to drip. Fold towel to give a 5 or 6 square inch working area. Apply towel to stained area with a blotting action until the area is moistured out. Do several areas if stained. Allow LST to work 3 to 5 minutes. Change working area on pad and repeat, working LST pad onto stained area. Check exposed area of LST pad. If stain or soiled area is reacting, you will note a transfer from the stained area to the LST pad. Keep changing to clean areas on LST pad and keep applying until stain or soiled substance is transferred to LST pad. When the job is completed, the LST pad will look like a checker board and stained or soiled area will be free of unwanted substance. On commercial or looped carpeting, a side to side, back and forth action will provide more agitation. Construction of carpet will determine degree of motion.

For stubborn stains, use the heat transfer method: Wet out stain with LST solution as noted above, then place a steam gun or iron on top of a damp pad for 10 to 15 seconds. Repeat with clean pads until the stain is completely transferred to the pads.

Place soiled pad in plastic garbage bag or second bucket, and launder as soon as possible. Do not store until soured.

PRE-CONDITIONING:

Spray and groom: Mix 5 ounces of LST with one gallon warm water. Spray over traffic lanes as well as any heavily soiled areas. Groom these areas working LST solution into fibers. Now spray the entire carpet, re-covering traffic lanes and excessively soiled areas. Allow to work for 5 minutes before cleaning.

Floor machine: Mix 5 ounces of LST in one gallon of warm water. Apply with a floor machine and a broken in shampoo brush. Allow 5 to 15 minutes dwell time before wet extraction.

Brush: Mix 6 ounces of LST in one gallon of hot water. (Hotter water produces more foam). Work into upholstery, tapestry, or carpet edges (filter dust, oil deposits, animal soil). Allow 5 to 15 minutes dwell time prior to cleaning.

Upholstery: After testing reveals no adverse reaction to water, mix 4 ounces of LST to one gallon of water. Spray a mist evenly over all the fabric. This will prevent water marks when cleaned on wet side. It will also provide “roll-back” action of foreign substances and soiling conditions.

NOTE: If upholstery has been subjected to hair or body oils, pre-spray with a slow drying, anhydrous dry solvent, i.e. Sublime, over oil impregnated areas, prior to application of LST. If upholstery is subjected to hair spray, towel dry area and re-apply dry solvent first, and follow with LST.

SAFETY: Wear respirator with organic chemical filter when spraying ANY dry solvent solution.

ORIENTAL RUGS:

LST is perfect for cleaning wool and silk rugs. Both cleaning and resoiling problems are reduced or even eliminated. After inspection, pre-testing and dusting, place rug in wash pit or other suitable wet cleaning area. Pre-spray fringes and other soiled areas with a slow drying, anhydrous dry solvent, i.e. Sublime. Mix 8 ounces of LST per gallon of lukewarm water. Apply to rug with rotary floor machine with solution tank and a soft shampoo brush. Apply evenly. Allow 5 minutes dwell time for LST to work on soils. Thoroughly rinse with clear, clean water. Insure rapid drying. Several of our LST cleaners charge \$1.50 - \$3.00 sf.

CARPET MAINTENANCE CONTRACTS:

Forget what all of the “Big Blue” machine salesmen tell you. The big gun won’t make you money on regular maintenance contracts and the customer will not have the best of service if you use one. Us “Old Timers” know a secret - a rotary floor machine. It works, and the Cimex machine works even better. Some even use the dry foam machines. Clean the carpet every month, or as often as it takes to keep it looking good. Then use your “big gun” hot water extractors after 12 or 18 months, or as often as it takes to make you feel like you are doing a complete job. The carpet will look great and you’ll make lots of money even at 5¢ per square foot. **Here’s how:**

Mix 5 ounces of LST per gallon of lukewarm water. Place in solution tank. Apply in sufficient quantity to wet out brushes, which in turn will wet out tufts. Don’t attempt a sudsy buildup, such as with shampoo. It is not necessary or even recommended, to pick up with a wet/dry vacuum. Do not extract, unless you are applying LST as your pre-conditioner. Vacuum when dry to remove soils. Don’t confuse LST with a shampoo mixture. LST will not cause a soil and residue buildup. Resoiling will be reduced, not increased. If you are concerned about contamination and odors, add an ozone unit to your solution tank and you’ll be all set.

BONNET CLEANER: (Spray and buff)

Mix 8 ounces of LST in one gallon of warm water. Spray an area about 100 square feet prior to using a bonnet pad on the carpeted area. If two technicians are available, one should precede the machine operator allowing approximately 5 minutes of chemical working time before buffing with the bonnet pad. As with all bonnet systems, change and/or rinse pad often, so the soil will not transfer from one dirty area to another. Clean pads will expedite the job, as well as enhance the results, without leaving soil attracting residues.

UPHOLSTERY CLEANING: (Wet cleaning)

- A. Pre-vacuum upholstered areas.
- B. Pre-condition.
- C. Mix 6 ounces of LST in a gallon of hot water. Place a natural sponge or horse-hair brush in the bottom of a 3 to 5 gallon bucket, and pour in sufficient solution to cover it. Whip up a lather. Shake out moisture and apply lather to all upholstered areas that show soiling.
- D. Rinse with wet extractor. Follow wet cleaning instructions found in SCT bulletins.

UPHOLSTERY CLEANING: (Maintenance)

- A. Mix 5 ounces of LST in one gallon of lukewarm water. Saturate pad and wring out excess water. Damp-wipe the fabric at least once per calendar quarter. This will prevent buildup, and probably prevent future cleaning needs, except for emergency spills and/or catastrophes.

FIRE RESTORATION: (Smoke and soot)

- A. Mix 8 ounces of LST in a gallon of warm water.
- B. Mist solution on hard surface areas.
- C. Wash down with saturated and lightly wrung out pads.

WALLCOVERINGS:

- A. Mix 5 ounces of LST per one gallon of lukewarm water.
- B. Saturate and remove excess water from pad.
- C. Wipe down wallcovering with light pressure strokes. Don't over agitate.
- D. On soiled spots, use pad with a "sponging" motion.

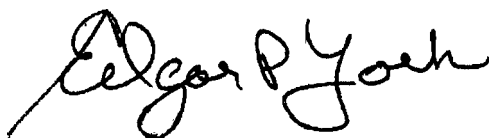
NOTICE: In all of the above, the oldest rule in cleaning is still in effect. **Pre-test all fabrics with the solution, first.** Dry as fast as possible. A drying time of 12 to 24 hours should not be exceeded.

ONE LAST THOUGHT

Keith Williams, the inventor of LST, asked that everyone take a second look at the name he gave his wonder goop - LST Cleaner, short for Low Surface Tension Cleaner. He never tagged it with a particular type of product. He didn't say, "Upholstery Cleaner" or "Carpet Cleaner". He simply said, "Cleaner". The results are amazing. One user says it's the greatest thing on white wall tires ever made. Another loves it for cleaning leather. One reports excellent results cleaning artificial plant leaves. As one who has watched it from infancy, I wouldn't bet it would clean your next impossible assignment, but, on the other hand, I wouldn't bet it wouldn't!! LST has proven itself many times over. TRY IT, YOU'LL LIKE IT!!!



Ed York (Cleanfax's Man of the Century and Grandfather of the Carpet Cleaning Industry)

A handwritten signature in black ink that reads "Edger P. York". The signature is written in a cursive, flowing style.

MATERIAL SAFETY DATA SHEET

LST

SECTION 1: Product Identification

Product Name: LST
Chemical Family: Surfactant Blend
Common or Trade Name: LST (Low Surface Tension Cleaner)
Chemical Name and Synonyms: Ethoxylate, sulfonate, fluorocarbon
Formula: Proprietary
Description: Thick gray paste

SECTION 2: Hazardous Rating (NFPA 704 Criteria)

		Hazard Rating Scale:
Health:	0	4 = Severe
Fire:	0	3 = Serious
Reactivity:	0	2 = Moderate
Special:	0	1 = Slight
		0 = Minimal

SECTION 3: Hazardous Ingredients TLV(TWA) TLV(STEL) BASIS

None. No components in this compound are considered hazardous or are listed with OSHA, DOT, USDA, EPA or ECGIH as hazardous.

SECTION 4: Fire and Explosion Data

Flash Point: Will not burn
Flammable Limits: Not applicable
Extinguishing Media: Not applicable

SECTION 5: HEALTH HAZARD DATA

Effects of Overexposure:
No known health hazard, acute or chronic

MATERIAL SAFETY DATA SHEET

LST

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SECTION 6: EMERGENCY FIRST AID PROCEDURES

Mild eye irritant - if eye contact occurs, flush with water for 5 minutes. If irritation persists, seek medical attention.

SECTION 7: Handling Procedures

Use normal precautions. Avoid freezing. If freezing occurs, thaw and mix well.

SECTION 8: Spill or Leakage Control Procedures

Flush down drain after scooping up excess. Standard refuse disposal method.

SECTION 9: Physical Data

Boiling Point:	212°F
Solubility in Water:	Soluble with a colloidal suspension of insoluble polymers
Specific Gravity:	1.031
Percent Volatile by Volume:	82.3
Evaporation Rate-Water:	1.0
pH:	5.8

SECTION 10: Reactivity Data

Stability:	Stable
Incompatibility:	None known
Hazardous Decomposition Products:	None known
Hazardous Polymerization:	Will not occur

This information in the Material Safety Data Sheet is drawn from recognized sources believed to be reliable but is provided without warranty.

The user must determine safe condition and assume liability for loss, injury, damage, or expense resulting from use of this product.

Prepared by: Chem Max® Corp • 231-798-7980

Date: 9/00

**Perhaps one of
the most
technologically
advanced
cleaning products
of our time!**

Uses extremely low surface tension and thixotropic polymer technology

LST is unique in that it out-cleans many aggressive chemicals but it is gentle, safe, and does not leave any soil-attracting residues. LST cleans by means of low surface tension and physical entrapment of soil particles. Both so gentle that LST will not harm anything that water itself will not damage.



**Non-Soil Attracting
Residue Formula —
Stays Cleaner Longer**

**SAFE! Will not damage anything
that water itself will
not damage.**

Manufactured by Chem Max Corp.,
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800.858.7237

A great return on investment!
LST may be considered expensive when comparing per gallon cost, but it's a great value when evaluated on its return on investment.

Keith Williams, LST's inventor was well known and well respected in the cleaning industry. In fact IICRC's highest achievement award for technological advancement is known as the Keith Williams Award. One of Keith's most outstanding achievements is his creation of LST.



Keith Williams
12/6/36 - 5/1/91

LST – A “Trade Secret” used by many of the “Old Timers” for cleaning their most profitable accounts:

- Oriental rugs • Wool Carpet • Silks • Antiques • Leathers
- Wallcoverings • Tapestries • Upholstery
- Articles with Unstable Colors
- Encapsulant Cleaner for Regular Maintenance Contracts

LST has multiple uses including:

- Spot and Stain Remover
- Gentle Cleaner • Pre-conditioner
- Non Soil-Attracting Cleaner/Encapsulant
- Neutral Cleaner • Bonnet Cleaner
- Shampoo Cleaner • Dry Foam Solution
- Wall Cleaner • Filtration Soil Cleaner
- Smoke and Soot Cleaner
- Leather Cleaner

SPECIFICATIONS	
Appearance:	Thick gray liquid
Odor:	Slightly sour
Weight/Gallon:	8.2 lbs.
Flash Point:	None
Std. Dilution:	5 oz. per gallon
pH Concentrate:	5.8
pH R.T.U.	6.5

