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3,827,857

**METHOD OF CLEANING THICK COVERING
TEXTILE MATERIALS AND COMPOSITE
CLEANING PAD THEREFOR**

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tion Ser. No. 112,430, Feb. 3, 1971. This application
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26 Claims

ABSTRACT OF THE DISCLOSURE

Thick covering textile materials are cleaned by deposit-
ing a textile-cleaning composition prepared from 10-30%
by weight of a detergent, 0.5-5.0% by weight of a volatile
solvent, 35-65% by weight of an absorptive pulverulent
solid, and water on the surface of the thick covering tex-
tile material; covering the textile-cleaning composition and
said thick textile material with a first porous absorptive
pad and a second vapor-impermeable covering so that the
first pad and the second covering permit the textile-clean-
ing composition to penetrate into said thick textile mate-
rial; leaving said textile-cleaning composition, said first
pad, and said second covering in place on said thick tex-
tile material until cleaning is complete; and removing
said first pad and said second covering from said thick
textile material. A composite cleaning pad may be used
in the practice of this invention.

REFERENCE TO RELATED APPLICATIONS

This application is a continuation-in-part of my applica-
tion entitled "Thick Covering Textile Cleaning Process
and Cleaning Pad," Ser. No. 112,430, filed Feb. 3, 1971,
and now abandoned.

This invention relates to a process and materials for
uniform cleaning of thick covering textiles, such as car-
pets, rugs, furniture fabrics, pillows, mattresses, drapes,
walls, ceiling, and the like, without removing the textile
from the support during the cleaning process and without
using any cleaning device of a mechanical or electrical
nature, thereby not interrupting or interfering with the
daily activities of people in the general area where the
cleaning operations are taking place.

It is the object of this invention to contribute to this
art and provide a cleaning process for thick covering
textile surfaces and materials therefor which eliminate
practically all heavy work, such as brushing, to force the
cleaning composition into the textile surface, and lifting
of furniture.

It is also another object of this invention to provide
cleaning of such textile surfaces without interrupting
or interfering with the daily activities of people in the
rooms where such textile materials are placed; further to
provide cleaning on hard to get places, such as corners,
against walls, around furniture, and under low furniture.

It is also an important object of this invention to pro-
vide very uniform cleaning of thick covering textile ma-
terials.

Another object is to restore color and luster, and avoid
bleed back to spots.

Another object is to avoid shrinkage, crushed pile,
distorted fiber nap, and wearing away of fabric.

A further object of the invention is to make the sur-
face of the covering textile material retain or even return
to its original shape, body, and setting, as to heat set
designs or the like, of either clipped, carved, sheared,
looped, twisted, velveteed, cut, or the like fabrics (depend-
ing upon the wear and condition of carpet).

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BACKGROUND OF THE INVENTION

U.S. Pat. 2,344,268 to Rensch relates to compositions
for cleaning fabrics. Absorptive pulverulent material and
a grease solvent are mixed to a moist powder which is
stored. This moist powder is then spread over the
surface of the fabric and brushed into the fabric until
most if it has disappeared from the fabric surface. The sol-
vent evaporates and the remaining dry powder with ab-
sorbed grease and dirt can be removed by vacuum clean-
ing.

U.S. Pat. 2,344,247 to Hopkins et al. relates to similar
compositions and recognizes the criticality of the evapora-
tion rate of the solvent, the fineness of the pulverulent
material, and the ratio of solvent to absorbent.

Hoxie in U.S. Pat. 3,418,243 teaches that a composi-
tion of 50 to 75% of an inert carrier, 4 to 15% of solvent,
0.25 to 10% of a surfactant, and 10 to 40% of water is
useful for cleaning carpets.

Baptist et al. in U.S. Pat. 3,149,364 teach the use of a
cleaning pad impregnated with a detergent and an adhe-
sive soluble in solvents for the detergent and having at-
tached thereto a backing material of at least equal dimen-
sions impermeable to said solvent for said detergent for
cleaning smooth surface, e.g., wood, metal, or plaster.

Watson in U.S. Pat. 2,076,604 teaches that a cleaning
pad impregnated with a mixture of a solvent, a wax, and
abrasive and polishing agent is packaged in a reusable,
substantially air-tight container from which it is removed
during use and in which the impregnated pad is protected
from evaporation until the time of use and between uses.

Although each of these references shows a method or
device for cleaning, none of them shows the simple method
of cleaning difficult-to-clean thick covering textiles which
is the object of the present invention. None of these refer-
ences discloses a cleaning pad peculiarly suited for the
practice of this method.

SUMMARY OF THE INVENTION

This invention broadly provides a method of cleaning
thick covering textile materials by the steps of depositing
a textile-cleaning composition prepared from 10-30% by
weight of a detergent, 0.5-5% by weight of a volatile sol-
vent, 35-65% by weight of an absorptive pulverulent solid,
and water on the surface of a thick covering textile mate-
rial; covering the textile-cleaning composition and the
thick textile material with a first porous absorptive pad
and a second vapor-impermeable covering so that the
first pad and the second covering permit the textile-clean-
ing composition to penetrate into said thick textile mate-
rial; leaving said textile-cleaning composition, said first
pad, and said second covering in place on said thick tex-
tile material until cleaning is complete, usually about 3 to
about 36 hours; and removing said first pad and said
second covering from said thick textile material. After
said first pad and said second covering have been removed
from said thick textile material, the textile material may
be and preferably is vacuum cleaned to remove dirt,
grease, and oil absorbed on the insoluble pulverulent
material.

The objects of the invention can also be realized by
depositing on one face of a porous absorptive pad a com-
position prepared from a detergent, a volatile solvent,
a water-insoluble absorptive pulverulent solid material,
and water; bringing the impregnated face of the pad in
contact with the thick textile material being cleaned and
applying a vapor-impermeable covering over the pad and
the thick textile material to retard (or slow down or delay)
evaporation of the composition. After the cleaning pro-
cess is complete, usually in 3 to 36 hours, the covering and
the pad are removed. The thick textile material can be
vacuum cleaned when dry.

The objects of this invention can be achieved conveniently by using a composite cleaning pad constructed from a bottom layer of vapor-impermeable covering to which is adhered a pad of absorptive material previously impregnated with the textile-cleaning composition and dried. The vapor-impermeable covering is preferably of a greater area than the impregnated absorptive pad, although it is understood that the impregnated absorptive pad and the vapor-impermeable covering can be of any dimensions required by the user. Thus, the size will vary according to whether the user intends to clean small spots or large areas.

For simplicity of utilization, the area of the vapor-impermeable covering surrounding the absorptive pad adhered thereto may be coated with an adhesive material so that the user simply wets the impregnated pad to reconstitute the textile cleaning composition with water and applies the assembly with the wet absorptive pad next to the surface of the textile material being cleaned. It will be apparent that when the composite pad is thus used, the textile-cleaning composition, the pad of absorptive material, and the vapor-impermeable covering are applied simultaneously to the thick covering textile material.

A preferred embodiment of the cleaning pad comprises a bottom layer of vapor-impermeable material to which is adhered a pre-dried mix of cleaning composition and absorptive fibers. The pre-dried mix is covered with an absorptive pad of larger area also adhered to the vapor-impermeable covering, which is provided with an adhesive coating on the surface beyond the edges of the absorptive pad. The composite cleaning pad is used by pouring water on the absorptive pad and applying the wet assembly with the absorptive pad next to the surface being cleaned.

When thus applied, the absorptive porous pad or cushion in combination with the impermeable covering provides a substantial vapor lock for a comparatively long time, depending on the relative impermeability of the covering, during which time the solvent, the detergent, the absorptive pulverulent material, and the water are thought to migrate throughout the fibers of the textile being cleaned and to loosen and dissolve all dirt, grease and oil.

While the absorptive pad and covering are in place on the textile material being cleaned, the dirt, grease, or oil is thought to wick up into the absorptive pad by capillary action, while the absorptive pulverulent material is thought to migrate into the thick textile to protect against "bleed back" of soil and against any tendency of the thick textile to become resoiled.

The base of the textile, if sensitive to solvents in general, can be protected by controlling the amounts of solvent added to the pad per unit area. However, thick covering textile materials often expand when moist, so there is really not much criticality as to the solvent amount.

Suitable absorptive pad or cushion materials which can be used in accordance with the present invention are the following substantially solvent and water resistant materials:

A. SYNTHETIC FIBERS

Acetate, acrylics, modacrylics, casein, nylon, polypropylene, polyester, polyacrylonitrile, rayon and fiber glass; sponge;

B. PLANT FIBERS

Coir, lisle, flax and linen, hemp, Manila hemp, jute, ramie, sisal, palm, kapok, rubber and cellulose, especially cellucotton; cotton; sponge;

C. ANIMAL FIBERS

Wool, silk, mohair; sponge;

D. MINERAL FIBERS

Asbestos.

The above list is not exhaustive and pads can be used comprising combinations of said fiber materials. Pads consisting of several layers, say 6 to 12, are preferred.

A layer of water indicating material (e.g., color changing) can be inserted between the covering and the pad to indicate when the cycle of cleaning and drying is complete, in case where a drying is desired before the covering and the pad are removed.

The vapor-impermeable or substantially vapor-impermeable covering used in the present invention can be any substantially solvent and water resistant flexible material, e.g., thin sheets of waxed paper, paper, such as bond, enameled, laminated, treated, etc., cellophane, polyethylene, polypropylene, polyisobutylene, ethylene-vinyl acetate copolymers, natural and synthetic rubbers, vinyl chloride homopolymers and copolymers, acrylic polymers and copolymers, and laminates of the foregoing with each other and with metal foils, e.g., aluminum foil. Vapor-impermeable coverings preferred in the practice of the present invention include waxed paper, cellophane, polyethylene, natural and synthetic rubbers, and vinyl chloride and vinylidene chloride homopolymers and copolymers.

The cleaning composition of the present invention comprises a detergent that can unlock and dissolve dirt, grease and oil, but also can lubricate and suspend dirt and soil particles. It should also lubricate and suspend the added solvent and water insoluble absorptive pulverulent material and be dissolved in the solvent of the cleaning composition.

Suitable proportions for preparing the textile-cleaning compositions useful in practicing this invention include from about 10% by weight to about 30% by weight of a detergent, from about 0.5% by weight to about 5.0% by weight of a volatile solvent, from about 35% by weight to about 65% by weight of an absorptive pulverulent solid, and water. Preferred proportions are between about 21% by weight and about 29% by weight of a detergent, between about 1.5% by weight and about 4.0% by weight of a volatile solvent, between about 45% by weight and about 55% by weight of an absorptive pulverulent solid, and water.

Detergents useful in preparing the textile-cleaning compositions used in this invention are wetting agents with cleaning and penetrating properties. Anionic, cationic, nonionic, and amphoteric agents are useful for the purposes of this invention.

Suitable anionic agents include alkali metal salts of the sulfates of C_{12} - C_{22} straight chain alcohols, e.g., sodium lauryl sulfate, potassium lauryl sulfate, sodium hexadecyl sulfate, alkali metal salts of C_{12} - C_{22} straight chain fatty acid, e.g., sodium laurate, sodium palmitate, potassium stearate, sodium stearate, sodium behenate; alkali metal salts of the alkylbenzene sulfonate, e.g., sodium dodecylbenzene sulfonate, sodium nonylbenzene sulfonate; alkali metal salts of monoglyceride sulfates, e.g., sodium glyceryl monolaurate sulfate, known commercially as Syntex M; dialkyl alkali metal sulfosuccinates, e.g., dioctyl sodium sulfosuccinate, known commercially as Aerosol OT; amine salts of C_{12} - C_{22} straight chain fatty acids, e.g., triethanolamine salt of stearic acid. Of these, the alkali metal salts of the C_{12} - C_{22} straight chain alcohol sulfates, e.g., sodium lauryl sulfate, sodium hexadecyl sulfate; the alkali metal salts of the alkylbenzene sulfonates (known to the trade as ABS detergents), e.g., sodium dodecyl benzene sulfonate; and sodium, potassium, and ammonium salts of C_{12} - C_{22} straight chain fatty acids, e.g., sodium laurate, potassium palmitate, sodium stearate, and the triethanolamine salt of stearic acid are preferred.

Cationic detergents useful in the practice of this invention are the ammonium salts, e.g., trimethyl hexadecylammonium chloride, triethylbenzylammonium chloride, stearylamine hydrochloride, behenylamine hydrochloride; and substituted ammonium salts, e.g., trimethyl(stearoyl-

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aminoethyl)ammonium sulfate, known commercially as Sapamine. Quaternary ammonium halides, e.g., trimethyl hexadecylammonium chloride, triethylbenzylammonium chloride, are preferred.

Non-ionic detergents operative for the purposes of this invention include polyglyceryl monoesters, e.g., penta-glyceryl stearate; pentaerythritol monoesters, e.g., pentaerythritol monopalmitate, polyethyleneglycol monoesters, e.g., polyethylene glycol laurate; polyethylene glycol monoesters, e.g., the adducts of nonylphenol and ethylene oxide; and reaction products of amines and ethylene oxide.

Useful ampholytic agents include the aminoacids, e.g. glycine, nitrilotriacetic acid, ethylene diamine tetraacetic acid, etc.

The solvent of the present invention should also unlock and dissolve dirt and soil from the textile material. It should also make the detergent more soluble. The solvent is thought to be substantially dissipated in the preparation of the composition, particularly in the "dried pad" processes. The solvent also purifies the composition. It is desirable that the detergent deeply penetrates the textile material. It must have a low degree of flammability, be substantially non-toxic and odor-free and evaporate fairly quickly. Suitable solvents are certain petroleum solvents, e.g., pentane, hexane, heptane, Stoddard solvent, Skelly B, Skelly F, and petroleum ether (ligroin), and halogenated solvents, e.g., perchloroethylene, carbon tetrachloride, fluorotrichloromethane, trichloroethylene, methylene chloride, 1,1,1-trichloroethane (methylchloroform), chloroform, ethylene dichloride, and trichlorotrifluoroethane. Preferred solvents are Stoddard solvent, carbon tetrachloride, perchloroethylene, and trichloroethylene.

When the detergent is selected from the group consisting of anionic and non-ionic detergents, a detergent builder may be added in amounts up to 2.0% by weight of the textile cleaning composition. Preferably, up to about 1.0% by weight is used. Suitable detergent builders include, sodium carbonate, potassium carbonate, sodium sulfate, potassium sulfate, sodium hydroxide, potassium hydroxide, tetrasodium pyrophosphate, trisodium phosphate, sodium polyacrylate, sodium tetraborate, sodium chloride, calcium chloride, magnesium chloride, and magnesium sulfate. Those which are preferred are sodium hydroxide, sodium carbonate, and sodium sulfate.

The solvent and water insoluble absorptive pulverulent material must have good dispersability (100 to 600 mesh) and absorption capacity. It is desirable that it clings to the fiber surfaces. Useful material include Montmorillonite clay (bentonite), calcium carbonate, magnesium silicate, fuller's earth, attapulgite clays, kaolin clays, magnesium carbonate and dolomite (calcium-magnesium carbonate). Of these, calcium carbonate, magnesium silicate, and Montmorillonite clay are preferred.

Typical cleaning compositions useful in practicing the present invention include:

A	Pounds
Sodium lauryl sulphate	25
Perchloroethylene	2½
Sodium hydroxide	½
Precipitated calcium carbonate	50
Water	22
Total	100

B	Pounds
Sodium dodecylbenzene sulfonate	22
Stoddard solvent	5
Sodium carbonate	1
Montmorillonite clay	55
Water	17
Total	100

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C	Pounds
Triethanolammonium stearate	27
Carbon tetrachloride	3
Fuller's earth	47
Water	23
Total	100

D	Pounds
Sodium lauryl sulfate	23
Trichloroethylene	4
Magnesium silicate	52
Water	21
Total	100

The cleaning composition is placed on the absorptive pad and should be used in an amount sufficient to saturate the pad.

The impregnated pad can be dried, especially by freeze drying, and stored until use. The dried impregnated pad may be placed on a piece of vapor-impermeable covering material and secured thereto. When the area of the vapor-impermeable covering around the dry impregnated pad is coated with adhesive material, the assembly is conveniently covered by release paper for ease in handling and displaying the composite pad. It is to be understood that the assembly may, but need not necessarily, be stored in a hermetically sealed container.

In use, the release covering is removed and the dried impregnated pad is drenched with water and pressed onto the textile material to be cleaned. If the covering has an adhesive layer, pressing the same against the textile material or surrounding surfaces, will provide a substantially vapor-tight condition. If the vapor-impermeable covering is not coated with adhesive, the pad-covering composite may be secured to the surface being cleaned with adhesive tape or kept in place with weights, staples, nails, tacks or could be sewn, etc.

The pad and covering can also be provided in continuous rolls for vast textile items, such as wall-to-wall and stairway carpets. Where pad portions adjoin each other, the covering edge of one pad portion can be trimmed with a pair of scissors and the edges of the two pad portions be pressed against each other to secure continuous uniform cleaning.

The cleaning composite is kept on the textile material being cleaned for a few minutes, for several hours, or for as long as several days, depending on the cleaning composition used and the amount of soiling in the textile material being cleaned.

The preferred composite of this invention is made by slurring cellulosic or other absorptive fibers listed above with one of the textile-cleaning compositions disclosed above, any comparable cleaning compound or commercially available composition. The slurry preferably contains between about 30% by weight and about 75% by weight of cellulosic or other absorptive fiber and from about 70% to about 25% by weight of a textile-cleaning composition. Especially good results are obtained using 40-60% of fiber. The slurry is molded to any desired shape, e.g., waffles, pills, cubes, tablets, etc. in a plastic mold and the molded mix of textile cleaning composition and absorptive fiber is freeze dried or dried in the air in a heated room.

Units of molded dried mix are adhered to the surface of a vapor-impermeable covering and covered with one or more plies of absorptive padding, e.g., a cellulose pad. The assembly is covered with a protective covering, optionally a release paper when the area of the vapor-impermeable covering outside the absorptive pad is coated with adhesive.

An optional embodiment of this composite consists in using a vapor-impermeable covering provided with micro perforations.

Another embodiment consists of the following layers, from top to bottom:

- (1) absorptive pad
- (2) molded cleaning composition-absorptive fiber dry mix
- (3) vapor-impermeable covering provided with micro perforations
- (4) absorptive pad
- (5) vapor-impermeable covering.

Although a few embodiments of the invention have been described in some detail, it will be apparent to the artisan that these embodiments are illustrative in nature and that a number of modifications of the cleaning process and the pad assembly can be effected without departing from the spirit or scope of the invention as defined in the appended claims.

What is claimed is:

1. A method for cleaning a thick covering textile material comprising

applying to the surface of the thick covering textile material a textile-cleaning composition prepared from between about 10% by weight and about 30% by weight of a detergent selected from the group consisting of alkali metal salts of the sulfate of C_{12} - C_{22} straight chain alcohols, alkali metal salts of the C_{12} - C_{22} straight chain fatty acids, alkali metal salts of the alkylbenzene sulfonates dioctyl alkali metal sulfo succinates, and triethanolamine salts of C_{12} - C_{22} straight chain fatty acids; between about 0.5% by weight and about 5.0% by weight of a volatile solvent selected from the group consisting of pentane, hexane, heptane, Stoddard solvent, petroleum ether, perchloroethylene, carbon tetrachloride, fluorotrichloromethane, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, chloroform, ethylene dichloride, and trichlorotrifluoroethane; from about 35% by weight to about 65% by weight of an absorptive pulverulent material selected from the group consisting of Montmorillonite clay, calcium carbonate, magnesium silicate, fuller's earth, attapulgite clay, kaolin clay, magnesium carbonate, and dolomite; and water;

covering said thick covering textile material and the textile cleaning composition with a first porous absorptive pad of solvent and water-resistant material; covering the first pad with a second water-impermeable covering selected from the group consisting of waxed paper, cellophane, polyethylene, natural and synthetic rubbers, and vinyl chloride and vinylidene chloride homopolymers and copolymers;

keeping said textile-cleaning composition, said first pad, and the second covering in place on said thick covering textile material for between about 3 and about 36 hours; and

removing said first pad and second covering from said thick covering textile material.

2. The method of claim 1, wherein said thick covering textile material from which said first pad and said second covering have been removed is dried and vacuum cleaned.

3. The method of claim 1, wherein the first pad is saturated with the textile-cleaning composition and said textile-cleaning composition and said first pad are applied simultaneously to said thick covering textile material.

4. The method of claim 1, wherein the first pad is saturated with the textile-cleaning composition and dried, said textile-cleaning composition is reconstituted by the addition of water, and said textile-cleaning composition and said first pad are applied simultaneously to said thick covering textile material.

5. The method of claim 1, wherein the first pad is saturated with the textile-cleaning composition and freeze-dried, said textile-cleaning composition is reconstituted

by the addition of water, and said textile-cleaning composition and said first pad are applied simultaneously to said thick covering textile material.

6. The method of claim 1, wherein the first pad is adhered to the second covering; said first pad is saturated with the textile-cleaning composition; and said textile-cleaning composition, said first pad, and said second covering are applied simultaneously to said thick covering are applied simultaneously to said thick covering textile material.

7. The method of claim 1, wherein the first pad is saturated with the textile-cleaning composition, dried, and adhered to the second covering;

said textile-cleaning composition is reconstituted by adding water to said first pad previously saturated with said textile-cleaning composition and dried; and said textile-cleaning composition, said first pad, and said second covering are applied simultaneously to said thick covering textile material.

8. The method of claim 7, wherein said first pad saturated with said textile-cleaning composition is freeze-dried.

9. The method of claim 1, wherein the textile-cleaning composition is prepared from between about 21% by weight and about 29% by weight of the detergent selected from the group consisting of alkali metal salts of the sulfates of C_{12} - C_{22} straight chain alcohols; sodium, potassium and ammonium salts of the C_{12} - C_{22} straight chain fatty acids, and alkali metal salts of the alkylbenzene sulfonates; between about 1.5% by weight and about 4.0% by weight of the volatile solvent selected from the group consisting of Stoddard solvent, carbon tetrachloride, perchloroethylene, and trichloroethylene; between about 45% by weight and about 55% by weight of the absorptive pulverulent material selected from the group consisting of calcium carbonate, magnesium silicate, and Montmorillonite clay; and water;

and wherein the first pad is saturated with said textile-cleaning composition, dried, and adhered to the second covering;

said textile-cleaning composition is reconstituted by adding water to said first pad previously saturated with said textile-cleaning composition and dried; and said textile-cleaning composition, said first pad, and said second covering are applied simultaneously to said thick covering material.

10. The method of claim 9, wherein said first pad saturated with said textile-cleaning composition is dried by freeze drying.

11. The method of claim 9, wherein said textile-cleaning composition is prepared from about 21% by weight to about 29% by weight of the detergent selected from the group consisting of alkali metal salts of the sulfates of C_{12} - C_{22} straight chain alcohols, sodium and potassium salts of the C_{12} - C_{22} straight chain fatty acids, and alkali metal salts of the alkylbenzene sulfonates, and contains up to about 2.0% by weight of a detergent builder selected from the group consisting of sodium carbonate, potassium carbonate, sodium sulfate, potassium sulfate, sodium hydroxide, potassium hydroxide, tetrasodium pyrophosphate, trisodium phosphate, sodium polyacrylate, sodium tetraborate sodium chloride, calcium chloride, magnesium chloride, and magnesium sulfate.

12. The method of claim 9, wherein said textile-cleaning composition contains up to 1.0% by weight of the detergent builder selected from the group consisting of sodium hydroxide, sodium carbonate, and sodium sulfate.

13. The method of claim 1, wherein a dried mixture obtained from about 70% by weight to about 25% by weight of the textile-cleaning composition and from about 30% by weight to about 75% by weight of an absorptive fiber is secured to a surface of the second covering and the dried mixture is covered with the first pad;

said first pad and the dried mixture are drenched with

water to reconstitute said textile cleaning composition; and

said textile-cleaning composition, said first pad, and said second covering are applied simultaneously to said thick covering textile material.

14. The method of claim 13, wherein said textile-cleaning composition is prepared from between about 21% by weight to about 29% by weight of the detergent selected from the group consisting of alkali metal salts of the sulfates of C₁₂-C₂₂ straight chain alcohols; sodium, potassium and ammonium salts of the C₁₂-C₂₂ straight chain fatty acids, and alkali metal salts of the alkylbenzene sulfonates; between about 1.5% by weight and about 4.0% by weight of the volatile solvent selected from the group consisting of Stoddard solvent, carbon tetrachloride, perchloroethylene, and trichloroethylene; between about 45% by weight of the absorptive pulverulent material selected from the group consisting of calcium carbonate, magnesium silicate, and Montmorillonite clay; and water.

15. The method of claim 13, wherein said textile-cleaning composition is prepared from between about 21% by weight and about 29% by weight of the detergent selected from the group consisting of alkali metal salts of the sulfates of C₁₂-C₂₂ straight chain alcohols, sodium and potassium salts of the C₁₂-C₂₂ straight chain fatty acids, and alkali metal salts of the alkylbenzene sulfonates, and contains up to about 2.0% by weight of a detergent builder selected from the group consisting of sodium carbonate, potassium carbonate, sodium sulfate, potassium sulfate, sodium hydroxide, potassium hydroxide, tetra-sodium pyrophosphate, trisodium phosphate, sodium polyacrylate, sodium tetraborate, sodium chloride, calcium chloride, magnesium chloride, and magnesium sulfate.

16. A composite cleaning pad for application to thick covering textile materials consisting of a vapor-impermeable sheet to one surface of which is adhered a dry porous absorptive pad of solvent and water-resistant material obtained by impregnating a porous pad with a textile-cleaning composition consisting of between about 10% by weight and about 30% by weight of a detergent selected from the group consisting of alkali metal salts of the sulfates of C₁₂-C₂₂ straight chain alcohols, alkali metal salts of the C₁₂-C₂₂ straight chain fatty acids, alkali metal salts of the alkylbenzene sulfonates, dioctyl alkali metal sulfosuccinates, and triethanolamine salts of C₁₂-C₂₂ straight chain fatty acids; between about 0.5% by weight and about 5.0% by weight of a volatile solvent selected from the group consisting of pentane, hexane, heptane, Stoddard solvent, petroleum ether, perchloroethylene, carbon tetrachloride, fluorotrichloromethane, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, chloroform, ethylene dichloride, and trichlorofluoromethane; from about 35% by weight to about 65% by weight of an absorptive pulverulent material selected from the group consisting of Montmorillonite clay, calcium carbonate, magnesium silicate, fuller's earth, attapulgite clay, kaolin clay, magnesium carbonate and dolomite; and water and drying the porous pad.

17. The composite cleaning pad of claim 16, wherein the dry porous absorptive pad is smaller in area than the vapor impermeable sheet, an area of said vapor-impermeable sheet around said dry porous absorptive pad is coated with an adhesive, and said dry porous absorptive pad and the area of said vapor-impermeable sheet are covered with a releasable covering.

18. The composite cleaning pad of claim 16, wherein the textile-cleaning composition consists of between about 21% by weight and about 29% by weight of the detergent selected from the group consisting of alkali metal salts of the sulfates of C₁₂-C₂₂ straight chain alcohols; sodium, potassium and ammonium salts of the C₁₂-C₂₂ straight chain fatty acid, and alkali metal salts of the alkylbenzene sulfonates; between about 1.5% by

weight and about 4.0% by weight of the volatile solvent selected from the group consisting of Stoddard solvent, carbon tetrachloride, perchloroethylene, and trichloroethylene; between about 45% by weight and about 55% by weight of the absorptive pulverulent material selected from the group consisting of calcium carbonate, magnesium silicate, and Montmorillonite clay; and water.

19. The composite cleaning pad of claim 16, wherein the textile-cleaning composition consists of from about 21% by weight to about 29% by weight of the detergent selected from the group consisting of alkali metal salts of the sulfates of C₁₂-C₂₂ straight chain alcohols, sodium and potassium salts of the C₁₂-C₂₂ straight chain fatty acids, and alkali metal salts of the alkylbenzene sulfonates, and contains up to about 2.0% by weight of a detergent builder selected from the group consisting of sodium carbonate, potassium carbonate, sodium sulfate, potassium sulfate, sodium hydroxide, potassium hydroxide, tetrasodium pyrophosphate, trisodium phosphate, sodium polyacrylate, sodium tetraborate, sodium chloride, calcium chloride, magnesium chloride, and magnesium sulfate.

20. A composite cleaning pad for application to thick covering textile materials consisting of a vapor-impermeable sheet to one surface of which is adhered a dried mixture obtained from about 30% by weight to about 75% by weight of an absorptive fiber and from about 70% by weight to about 25% by weight of a textile-cleaning composition consisting of between about 10% by weight and about 30% by weight of a detergent selected from the group consisting of alkali metal salts of the sulfates of C₁₂-C₂₂ straight chain alcohols, alkali metal salts, of the C₁₂-C₂₂ straight chain fatty acids, alkali metal salts, of the alkylbenzene sulfonates, dioctyl alkali metal sulfosuccinates, and triethanolamine salts of C₁₂-C₂₂ straight chain fatty acids; between about 0.5% by weight and about 5.0% by weight of a volatile solvent selected from the group consisting of pentane, hexane, heptane, Stoddard solvent, petroleum ether, perchloroethylene, carbon tetrachloride, fluorotrichloromethane, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, chloroform, ethylene dichloride, and trichlorotrifluoroethane; from about 35% by weight to about 65% by weight of an absorptive pulverulent material selected from the group consisting of Montmorillonite clay, calcium carbonate, magnesium silicate, fuller's earth, attapulgite clay, kaolin clay, magnesium carbonate, and dolomite; and water and over which dried mixture is secured a porous absorptive pad of solvent and water-resistant material.

21. The composite cleaning pad of claim 20, wherein the porous absorptive material is smaller in area than the vapor-impermeable sheet, an area of said vapor-impermeable sheet around said porous absorptive pad is coated with an adhesive, and said porous absorptive pad and the area of said vapor-impermeable sheet are covered with a releasable covering.

22. The composite pad of claim 20, wherein the vapor-impermeable sheet contains micro perforations and wherein the porous absorptive pad is smaller in area than said vapor-impermeable sheet, as area of said vapor-impermeable sheet around said porous absorptive pad is coated with an adhesive, and said porous absorptive pad and the area of said vapor-impermeable sheet are covered with a releasable covering.

23. The composite cleaning pad of claim 20, wherein the textile-cleaning composition consists of between about 21% by weight and about 29% by weight of the detergent selected from the group consisting of alkali metal salts of the sulfates of C₁₂-C₂₂ straight chain alcohols; sodium, potassium and ammonium salts of the C₁₂-C₂₂ straight chain fatty acids, and alkali metal salts of the alkylbenzene sulfonates; products of amines and aminoacids; between about 1.5% by weight and about 4.0% by weight of the volatile solvent selected from the group consisting of Stoddard solvent, carbon tetrachloride, perchloroeth-

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ylene, and trichloroethylene; between about 45% by weight and about 55% by weight of the absorptive pulverulent material selected from the group consisting of calcium carbonate, magnesium silicate, and Montmorillonite clay; and water.

24. The composite cleaning pad of claim 20, wherein the textile-cleaning composition contains from about 21% by weight and about 29% by weight of the detergent selected from the group consisting of alkali metal salts of the sulfates of C₁₂-C₂₂ straight chain alcohols, sodium and potassium salts of the C₁₂-C₂₂ straight chain fatty acids, alkali metal salts of the alkylbenzene sulfonates, polyglyceryl monoesters, pentaerythritol monoesters, polyethylene glycol monoesters, polyethylene glycol monoethers, and the reaction products of amines and ethylene oxide and contains up to about 2.0% by weight of a detergent builder selected from the group consisting of sodium carbonate, potassium carbonate, sodium sulfate, potassium sulfate, sodium hydroxide, potassium hydroxide, tetrasodium pyrophosphate, trisodium phosphate, sodium polyacrylate, sodium tetraborate, sodium chloride, calcium chloride, magnesium chloride, and magnesium sulfate.

25. The composite cleaning pad of claim 20, wherein a second porous absorptive pad is secured to a sheet of

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vapor-impermeable covering provided with micro perforations and placed between the dried mixture and the vapor-impermeable sheet and wherein said dried mixture is next to the sheet of vapor-impermeable covering provided with micro perforations and the second porous absorptive pad is next to the vapor-impermeable sheet.

26. The method of claim 1, wherein the textile-cleaning composition consists essentially of about 25% by weight of sodium lauryl sulfate, about 2.5% by weight of perchloroethylene, about 0.5% by weight of sodium hydroxide, about 50% by weight of calcite and water and wherein said second covering is waxed paper.

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