

ELECTRODRY GROUP

Leather Cleaning Manual



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Introduction

History of Leather

Leather tanning is without a doubt one of the oldest human activities. In the beginning, skins obtained from hunting and livestock breeding could be used for clothing or tents, but they became stiff at low temperatures, while they rotted with heat. It was probably then that attempts were made to render them more flexible and stronger by rubbing in animal fats, the first rudimental tanning process is mentioned in Assyrian texts and in Homers Iliad.

Another process was smoking, which almost certainly started by accident, and which later became formaldehyde tanning, as this substance is found in the vapours produced by burning green leaves and branches. It was soon discovered that the rotting process could also be stopped by drying, carried out by exposure to the sun or by the dehydrating action of salt. Vegetable tanning was also known in very ancient times although it is not clear how the tanning action of the tannin contained in the bark of some plants (especially oak) was discovered. Another method known since the earliest times is tanning, based on the use of alum, a mineral which is fairly widespread in nature, particularly in volcanic areas.

Good Business Practice

Professional leather cleaners are expected to provide the following:

Quality service

This incorporates a reliable, prompt and efficient service. The client should be advised as to all procedures. The attending technician or technicians should be punctual, polite, helpful, and understanding of the clients' needs in relation to their goods to be cleaned. They should also be correctly attired (wear clean, correct uniform, etc.).

Quality equipment

This means vehicles and equipment that must be readily available and in good working order at all times. All equipment should be properly labelled with the Company name, telephone numbers and address as well as any appropriate safety advice. All equipment and vehicles should be checked and maintained regularly, without waiting for breakages to occur.

Each vehicle should be presentable and properly signed written. It should be clearly defined who is responsible for the maintenance of equipment and vehicles to ensure their availability and readiness.

Qualified staff

This requires that all personnel involved in all of the procedures are properly trained and skilled in their areas of involvement. This could include the receptionist (telephonist), office staff and on-site technicians. This could mean attending appropriate Training courses relevant to the job specification of each member of staff involved.

Communication skills are of the utmost importance for all personnel involved in the Service industry.

Documentation

Provision of professional documentation, which means the availability of all appropriate forms, starting with the initial telephone call checklist, pre-inspection forms, through to a final account.

Chemicals, etc.

Provision of chemicals and appropriate ancillary supplies must be constantly maintained and re-stocked. All chemicals should be clearly labelled and stored in appropriately ventilated areas. For all chemicals that are used and carried either at the factory/warehouse, in each vehicle or on site safety data sheets (SDS) must be available. Health and Safety

Ensuring safety is a prime responsibility of any professional. These incorporate provision of a healthy and safe environment for the technician as well as customers.

Chemical Safety

General Chemical Safety

1. Store chemicals securely in correctly labelled appropriate containers.
2. Containers used on site should be correctly labelled
3. All safety data sheets (SDS) must be available wherever chemicals are being used or carried (vehicle, on site, factory)
4. Carry and use protective equipment such as chemical resistant gloves, respirators with appropriate filter cartridges and eye protection.
5. Dispose of waste and unused chemical properly in accordance with local regulations as per Australian and New Zealand standards
6. Always read labels and observe safety considerations

7. Do not sniff chemicals or containers to find out what it is. If in doubt, throw it out
8. Wash your hands well after handling any chemicals or containers with chemicals
9. Avoid skin contacts with chemicals.
10. Hydrofluoric acid rust remover has an anaesthetic effect and is dangerous because it attacks skin rapidly and the damage will not be felt immediately. It should never be used without wearing rubber gloves
11. Continuous exposure to even the mildest of chemicals can lead to problems. Nearly all chemicals can have a threshold limit value (TLV). This rates the parts per million at which exposure may become a problem
12. Always cap your chemicals immediately following their use
13. Never leave any chemicals unattended
14. Ensure that children or pets do not have access to the area while chemicals are being used

Equipment Safety

Electrical Safety

1. Have all electrical equipment regularly checked and serviced at least every 12 months (more often if equipment is used in a construction site. Inspect power cords for wear, fraying or other damage
2. All electrical equipment that is not marked as being double insulated, should be properly earthed (grounded)
3. Use an earth leakage protection device and check all power points are earthed
4. Never disconnect safety features on equipment
5. Do not allow electrical cords or plugs to become wet
6. If you blow a fuse in a fuse box, replace it with the correct size fuse wire (15 Amps for power points are standard throughout Australia)
7. Disconnect power cords from sockets before doing any maintenance on your Equipment

8. Disconnect electricity before filling equipment with water

Site and Personal Safety

1. Ask the customer if there are site risks that you need to be aware of such as trip hazards or faulty power points.
2. Undertake a risk inspection before commencing works. Complete the pre-inspection on the Electrodry Invoice
3. Arrange equipment so that it is out of traffic ways
4. Arrange hoses and power cords so that people cannot trip
5. Always ask people to keep children away from the work area at all times
6. When not using hoses, turn off pressure hoses to prevent accidental spraying of fluids and keep a tool connected to the vacuum hose to prevent accidental injury
7. Keep spotters under cover and under strict supervision at all times
8. Use drop sheet to help prevent slippery floors
9. Post caution signs to warn customers that floors may be slippery and give verbal warnings as well
10. Ask customers if any occupants suffer allergic reactions, and take appropriate actions or precautions. Certain chemicals (usually perfumed deodorants used in some chemicals, solvents, alkaline or acid solutions or enzymes) or even just raised humidity levels can trigger attacks in hypersensitive people. Sometimes the fine dust kicked up by pre-vacuuming or brushing the air conditioner can fill the air with Dust-mite soiling (a very well-known allergen)
11. Use correct lifting techniques to avoid back injury

Types of Leather

- Pure Aniline
- Semi Aniline
- Corrected Grain

- Suede Split

Pure Aniline

Pure Aniline is without a doubt one of the softest leathers to the touch, it is produced from the finest selection of raw hides. Dyeing takes place in large wooden drums where the hides are bathed until the desired colour is achieved. The natural surface of these hides remains unaltered, and their structure is easily recognized.

Pure aniline leather presents some disadvantages when compared to other finished leathers, its light resistance is very poor, it has excessive elasticity and it is susceptible to stains and marks.

Numerous pure aniline hides undergo a waterproof treatment that does not improve in any way its resistance to light and elasticity. With these treatments stains can be avoided, but the leather must be cleaned immediately after any spill

Semi Aniline

This leather is produced from the finest raw hides. It is fully aniline dyed in drums. Then the leather is slightly covered with organic pigment which makes the dyeing more uniform and increases its resistance to wear, resistance to light and resistance to stain.

A major challenge in the production of semi aniline leathers is to produce a highly resistant product maintaining as much as possible the suppleness and feel of pure aniline.

Corrected Grain

This leather is produced from a lower selection of hides that are aniline dyed and machine buffed to remove the defects and imperfections from the surface layer. After being heavily coated with pigments a replacement grain must be embossed to recreate their natural appearance and look.

This product is highly resistant to wear, highly resistant to light and highly resistant to stain. It can be cleaned from stains quite easily, although it is always recommended to clean any spill or stain as soon as they occur.

Split Suede

Suede is produced from the under layer of the hide that has been split. The split side is aniline dyed and buffed to create the typical velvety effect.

Suede splits are not only used in upholstery, but also in shoes, garment and handbag industries.

Inspection

1. Do a colour fast test in an inconspicuous area of the suite
2. Check for:
 - Broken seams
 - Loose or broken buttons
 - Scratches
 - Tears
 - Ink and biro marks and other stains
3. Look under cushions and behind the suite before you agree to do the job
4. This is the time that you decide to tell the customer about the extended warranty because your products and process will provide a good outcome. It is therefore advisable to have this suite covered for accidental damage

Dry Soil Removal

Thoroughly vacuum the entire suite, removing cushions and throw covers.

Be careful not to allow the vacuum fittings to contact the leather and cause scratches

Sometimes light brushing with a soft long hair brush will help you get to the hard to reach areas, especially around buttons and in folds.

Water Test

- | | |
|--------|---|
| Step 1 | Using an eyedropper place 2 drops of water on leather in inconspicuous location. If the water soaks in, we can't clean it.

If it does not soak in, move to step 2 |
| Step 2 | Using a dropper, 2 drops onto a used seating position (where your bum seats) if it soaks in, we can't clean.
If it doesn't soak in agitate, if it soaks in during this process, we can't clean
If water does not soak in, clean away. |

Preparation

Rinse and wring out a clean white terry cloth in warm to hot water and completely wipe over the entire suite to remove tough dust and stubborn soils.

This will help your leather cleaner perform at its optimum

Clean

With a glove fitted rinse and lightly wring out (leave some solution in the cloth) another clean white terry cloth using the leather cleaner mixed 1:1 in warm to hot water. Apply with gloved, open hand holding the cloth and in a circular motion to remove soils and marks.

Work quickly and lightly in cleaner areas of the leather and more slowly and slightly heavier in the dirtier areas like cushion fronts, head rests, and arm rests.

For stubborn or badly marked areas agitate lightly in a circular motion with the brush provided in your leather kit, you can add some extra cleaner to the brush if you wish. Do not agitate or scrub harshly.

Condition

When the suite is dry cleaning apply the leather conditioner to another clean dry white terry cloth and apply it to the suite direct from the cloth and work it into the leather in circular motion until the leather looks moist and “healthy”.

Never apply conditioner or cleaning products direct to the leather. To assist the conditioner to dry properly use a clean dry white terry cloth and buff it lightly in both directions until dry and showing a low sheen.

Protection

Pour enough protector to complete the job into your clean leather bucket. With a gloved hand immerse a sponge into the protector and lightly wring it out.

Then apply the protector in one direct with the sponge and be careful not to leave drips, spills or runs.

Then apply again in the opposite direction. Leave to dry. Low speed air mover will help you here.

DO NOT RETURN UNUSED PROTECTOR TO THE BOTTLE, YOU MUST DISCARD IT

Customer Care Kit

Customers should always be offered a care kit to help them look after their own furnishings, regardless of the cost of the job or how much you feel they can afford.

Well maintained leather is easier for you to clean next year.

Encourage your customers to take ownership in caring for their own goods.

Tips

- Always take your time, be methodical and work to get good results
- Always offer a warranty when the pieces are of good appearance
- Always do a thorough inspection before you agree to clean
- Always use warm to hot water when wiping and cleaning
- Never add other chemicals to your leather care products
- Never press firmly or scrub when agitating or applying
- Always use cloths in circular motion
- Never wash your leather care cloths in bleach
- Always use dry, clean white terry cloths, not synthetic
- Always vacuum before wiping and after inspection
- Never allow vacuum fittings to scratch the leather or remove buttons
- Always offer the customer an aftermarket care kit to keep the leather in good condition until you next clean it

Leather Terms

<i>Aniline Dyed:</i>	Leather that has been through-dyed by immersion in a dyebath and has not received any coating of pigment finish.
<i>Aniline:</i>	Stained Leather that has been stained by brushing, padding, or spraying and has not received any coating of pigmented finish.
<i>Belly:</i>	The part of the hide covering the underside and the upper part of the legs of the animal.
<i>Buffed leather:</i>	Leather from which the top surface of the grain has been removed by an abrasive or bladed cylinder or, less generally, by hand.
<i>Calf:</i>	The skin of a young or immature bovine animal not exceeding a certain weight.
<i>Chrome re-tan:</i>	Leather which has been first chrome tanned throughout its thickness and subsequently further treated or tanned with vegetable and/or synthetic tanning agents and/or resin filling materials, these retaining agents penetrating notably, but not necessarily completely, into the interior.
<i>Chrome tanned:</i>	Leather tanned either solely with chromium salts or with chromium salts together with quite small amounts of some other tanning agent used merely to assist the chrome-tanning process, and not in sufficient amount to alter the essential chrome tanned character of the leather.
<i>Combination tanned:</i>	Leather tanned with two or more tanning agents.

<i>Corrected Grain:</i>	Leather from which the grain layer has been partially removed by buffing to a depth governed by the condition of the raw material and upon which a new surface has been built by various finishes. See buffed leather.
<i>Cow hide:</i>	Leather made from unsplit cow hide or its grain split. In some countries (not Spain) the term is also loosely applied to similar leather from the hide of any bovine animal. The term is not to be applied to leather
<i>Crocking:</i>	Transferring of colour or finish from leather to other materials by rubbing or abrasion.
<i>Crust:</i>	Leather that has been tanned, dyed and dried, but not finished.
<i>Embossed leather:</i>	Leather embossed or printed with a raised pattern either imitating or resembling the grain pattern of some animal, or being quite unrelated to a natural grain pattern.
<i>Fat tanned:</i>	Hide or skin, which has been converted into leather by treatments, involving the incorporation of soft animal fats which undergo chemical changes in contact with the fibre, leading to fixation of fatty matter.
<i>Finish:</i>	The final process or processes in the manufacture of dressed leather.
<i>Fleshing:</i>	Scrapings removed from hides by the flesher.
<i>Full grain:</i>	Leather bearing the original grain surface as exposed by the removal of the epidermis and with none of the surface removed by buffing, snuffing, or splitting.
<i>Grain:</i>	The pattern, characterized by the pores and peculiar to the animal concerned, visible on the outer surface of a hide or skin after the hair has been removed.
<i>Leather:</i>	A general term for hide or skin with its original fibrous structure more or less intact, tanned to be imputrescible. The hair or wool may or may not have been removed. Leather is also made from hide or skin which has been split into layers or segments before or after tanning, but if the tanned hide or skin is disintegrated mechanically and/or chemically into fibrous particles, small pieces or powders and then, with or without the combination of a binding agent, is made into sheets or forms are not leather.
<i>Liming:</i>	The process of removing hair from a raw hide through the use of chemicals.
<i>Milling:</i>	Process in which tanned hides are tumbled in rotating drums using a combination of heat and a misting of water to soften the hand or enhance the grain.

<i>Natural Grain:</i>	Leather whose grain has not been altered in any way, so the natural appearance of the grain is apparent.
<i>Nubuck:</i>	Cattle hide leather, buffed on the grain side to give a velvety surface; white or coloured.
<i>Patina:</i>	A surface lustre that develops on pure anilines and nubucks; grows more beautiful with passing of time.
<i>Pigment:</i>	Finished Leather to whose surface a finish containing fine pigment particles in suspension has been applied.
<i>Printed Leather:</i>	Leather bearing a surface pattern produced usually by embossing, but sometimes by other methods, e.g. by silkscreen printing.
<i>Protected Leather:</i>	Leather in which certain special chemicals have been incorporated to render it less liable to deteriorate through exposure to polluted atmospheres. The treatment is often applied to vegetable tanned upholstery and bookbinding leathers.
<i>Pull-up:</i>	Refers to leather that derives colour from dyes, waxes, and/or oils. When this leather is pulled during upholstery, the oils/waxes dissipate and become lighter in those areas.
<i>Pure Aniline:</i>	Leather which receives its only colour from dyes and exhibits natural markings and characteristics.
<i>Raw Hide:</i>	A hide which has only been treated to preserve it prior to tanning.
<i>Retanned:</i>	Leather which has been subjected to an additional tannage with similar or other tanning materials.
<i>Sauvage:</i>	A two tone effect which adds depth and character. Can be tone-on-tone or contrasting effect.
<i>Sammiering:</i>	In tanning, the process of pressing the water out of hides.
<i>Semi-aniline:</i>	finished Leather which has been aniline dyed or stained, incorporating a small quantity of pigment, not so much as to conceal.
<i>Shrunk (en) grain:</i>	Leather specially tanned so as to shrink the grain layer and having a grain surface of uneven folds and valleys.
<i>Side:</i>	Half of a whole hide with offal (head, shoulder, and belly) attached, obtained by dividing it along the line of the backbone.

<i>Split:</i>	The under portion of a hide or skin that has been split into two or more thickness. Splits may be finished and embossed to simulate a full top grain.
<i>Suede Split:</i>	Leather made from the flesh split of hide or skin and finished with a velvet-like nap.
<i>Suede:</i>	Velvet-like nap finish produced on leather with abrasive action.
<i>Tanning:</i>	The processing of perishable raw hides and skins by the use of tanning materials into the permanent and imputrescible form of leather.
<i>Top Finished:</i>	A leather which has been given a final coating of a finish to confer special properties such as gloss, level colour, fastness to wet rubbing, waterproofness and so forth.
<i>Top Grain:</i>	The top layer of a hide after the splitting process in which the hair and epidermis have been removed. The grain may be either natural or embossed.
<i>Vegetable Tanned:</i>	Leather tanned exclusively with vegetable tanning agents or with such materials together with small amounts of other agents used merely to assist the tanning process or to improve or modify the leather, and not in sufficient amounts to alter notably the essential vegetable character of the leather.
<i>Water-resistant</i>	Leather resistant (repellent) to the penetration of water, usually chrome tanned, or combination tanned, originally heavily greased, but other water-resisting (repelling) agents may be used.
<i>Wax(ed) (waxy) Leather:</i>	Upper Leather finished on the flesh side and dyed; vegetable tanned with a high content of hard grease, though not necessarily wax. Leather bearing a wax finish.
<i>Wet Blue Leather:</i>	Leather which after chrome tanning has not been further processed and is sold in the wet condition