

THE SCIENCE BEHIND LEATHER THERAPY

Leather Therapy is an award winning, patented product range offering the best leather care money can buy. Rather than rely on traditional remedies such as glycerine and neatsfoot oil, the company founders took a scientific approach to leather care. To understand what makes Leather Therapy different, we must first look at the properties of leather and how it is made.

Leather starts off as animal skin and is preserved and strengthened via the tanning process. First, hides soak for many weeks in tanning liquors that make them more chemically inert. Vegetable-tanned leathers steep in solutions with extracts of tree bark or other plants and tree parts that contain astringent chemical compounds called tannins.

The untreated hides emerge from the tanning liquor preserved but not pliable. To make the firm, boardy hides supple again, they are treated with fats to lubricate the fibres and soften the leather. At one time, men known as curriers hand rubbed fats into the leather. Now, hides are mechanically tumbled with a fat liquor, an emulsion of fats and water with a neutral pH that will not move the tannins or salts out of the fibres, to soften them. Bleaching and dyeing are the final steps before the leather is used to make equipment, clothing or furniture. At the end of the process the leather has a slightly acidic pH.

Once you have your leather products it makes sense to take good care of them and there are a broad range of leather care products on the market. In summary, they can all be grouped into four categories:

- a cleaner
- a conditioner
- a polish or other surface finish, or
- a moisture barrier

Cleaning your leather is the first step in the process of leather care and should be done on a regular basis. Leather cleaners contain surfactant agents that lift away dirt, sweat and body oils from the leather's surface. They are intended for frequent use to keep damaging dirt and gunge from building up. Look for code words like "wash" or "clean" or "removes dirt." For the longest leather life, choose mild cleaners like **Leather Therapy WASH** that have a neutral pH and help maintain the leather's lubricating oils rather than stripping them away. The strong alkalinity of soaps and detergents, even vegetable-based soaps, damages leather over time by literally lifting the tannins preserving the leather right out of its fibres. Cleaners should not leave any greasy film behind. These residues build up in stitching lines to become a breeding ground for bacteria that weaken threads and for smelly moulds. **The practice of rubbing saddle soap into leather is madness, you wouldn't leave soap on your own skin without rinsing it off so why do it to your leathers?!**

Leather conditioners containing fats or oils to lubricate fibres and keep leather supple are meant for occasional use. Look for code words like "condition" or "restore" or "penetrate." Under a microscope, leather's fibres resemble a network of fine steel wool. A good conditioner needs to penetrate deeply within this network, not just sit on the surface. Liquid blends of animal-based oils that mimic the fat liquors tanners use to supple stiff hides after they come out of the tanning solution help preserve the leather's original chemistry. Again, choose products that have a neutral pH like **Leather Therapy Conditioner & Restorer** to avoid damaging your leather. **Thick, greasy conditioners sit on the leather's surface and simply cannot penetrate as deeply as liquid products can.** But avoid liquid products that contain petroleum distillates. Petroleum is a solvent that can weaken leather structure over time. Read the label (the word "compound" is a tip-off that the conditioner may contain petroleum derivatives) and use your nose to detect petroleum by-products including mineral oil.

There are some multi-use products that combine a cleaning agent with a conditioner. Saddle soap was the original one-step product, combining soap with fats or glycerine. The problem with most one-step products is that while they may both clean and condition simultaneously, they don't do either one very well. They tend to condition only superficially and to leave residues. Choose separate cleaners and conditioners to do both jobs well. **The traditional liquid glycerine or soap bar is still commonly used but glycerine is a humectant, which means that it attracts water from the air, which can encourage mould and mildew growth in your leather as well as the build up of waxy deposits on the leather surface.**

Leather polish helps your leather look showroom shiny for special occasions. Look for code words like "polish" or "shine" or "glossy finish." Some polishes, such as paste shoe polishes, contain colorants dispersed in wax that can be buffed to a high shine. Use these polishes sparingly as they can rub off on your clothes. Wax-based polishes, liquid shoe polishes and spray-on saddle lacquers add shine at the expense of clogging leather pores. So you need to remove them before a conditioner can penetrate the leather. Silicone based polishes can dry leather out over time, making it brittle and can make leather slippery to sit on or grip. To save both your leather and elbow grease, try an acrylic-based product like **Leather Therapy Finish** that adds lustre and lightly seals the leather surface while still allowing it to breath and absorb conditioner.

Moisture barriers prevent excess rain or puddles from sluicing conditioning oils out of leather. When that happens, leather dries stiff or spotted. Look for code words like "repels" or "protects" or "water resistant." Paste products based on animal fats like lanolin or mink oil are rubbed in to fill the leather's pores and form a water barrier. They should not be used on napped leathers like suede or nubuck because they lay down the surface fibre. They also leave a greasy residue that makes it difficult to polish smooth leather again and can attract dirt. Wax products work by applying a physical barrier to the leather but again block pores & can leave a sticky residue as well as dulling the appearance of leather.

Spray on water barrier formulas containing silicone can, again, dry leather out over time. Next generation water barrier sprays like **Leather Therapy Water Repellent** create a microscopic net of flexible acrylic polymers that allow leather pores to breathe from within while holding larger water molecules at bay outside.