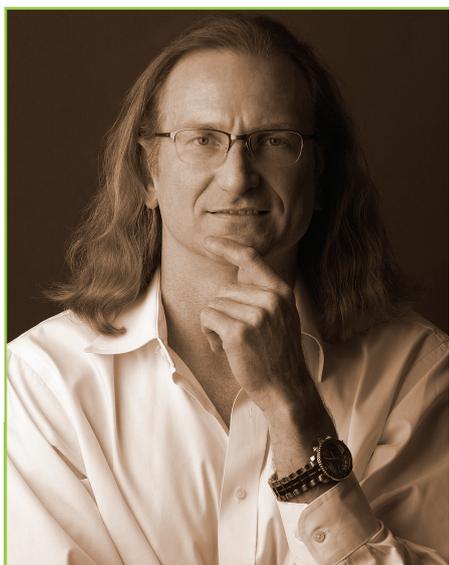


THE SCI-FILES



DOUG SCHOON

Doug Schoon is an internationally recognised scientist, author and educator with over 30 years' experience in the cosmetic, beauty and personal care industry. He is a leading industry authority known for his technical and regulatory work and is co-chair of the *Nail Manufacturers Council (NMC)*.

Doug was CND™'s chief scientist and head of the R&D laboratory, QA, and field testing/evaluation departments for almost 20 years and has authored several books, video and audio training programmes, as well as magazine articles about salon products, safety, and practices for salon professionals.

In 1986, Schoon founded *Chemical Awareness Training Service (CATS)* – the beauty industry's first safety training company. This was followed by his book, *Nail Structure & Product Chemistry*, 1st and 2nd Edition, which has become essential reading for nail professionals. More recently, he has launched *Face-to-Face with Doug Schoon*, an internet learning series that focuses on nails, nail products and services.

www.schoonscientific.com

[f /DougSchoonsBrain](https://www.facebook.com/DougSchoonsBrain)

[t @DougSchoon](https://twitter.com/DougSchoon)

Watch Doug's internet series on nails, nail products and services at www.facetofacewithdougshoon.com

Globally renowned scientist and nail expert, **DOUG SCHOON**, explores the ideas and concerns surrounding nails, techniques and products

UV GELS: THE BURNING ISSUES

Why do some UV gels 'burn like crazy' under a nail lamp? When UV gels are properly applied and cured, they can become warm, but they are not supposed to burn to the point of creating pain. This assumes the nail professional is using a good quality, branded UV gel that is well formulated, properly applied and cured as directed by the manufacturer using the correct nail lamp.

Product developers take steps to ensure the UV gel doesn't 'burn like crazy', so excessive heat is an indication that the product has not been properly applied or cured. For example, if the incorrect UV nail lamp is used, over heating is often unavoidable. This is just one of the many reasons why it is very important to use the correct nail lamp for your system of choice. There is no such thing as a nail lamp that will properly cure any UV gel.

When UV gels are applied too thickly or cured in an unsuitable nail lamp, excessive heating becomes likely. When the correct thickness of UV gel is applied, it may become warm, but when applied too thickly, additional heat is released and the nail can become very warm. When done in combination with a nail lamp that releases too much UV energy for curing the UV gel, then over heating is very likely to occur. That's because one symptom of over-curing a UV gel is the release of excessive amounts of heat.

This heat can cause the nail plate to separate from the nail bed to create an open space called onycholysis. This can lead to nail bed infections and complete loss of the nail plate.

Once onycholysis occurs, the nail plate should be kept short and clients must be careful until it grows out again. When the hyponychium seal under the free edge is reestablished, the nail plate should grow normally. Depending on the severity of the onycholysis, this condition may take several months to resolve itself. During that time, clients should be instructed to wear gloves and do everything they can to prevent catching the nail on objects that could pry the plate back and lead to even more nail bed separation. Keeping the nail plate short will help prevent additional damage.

The other possible reason the UV gel may feel too hot could be because the nail bed has been friction burned by overly aggressive filing techniques. This is often done when nail technicians use heavy handed filing techniques, such as too much downward force on the nail file. When an electric file is improperly used on the nail plate, the results can be friction burns to the nail bed. Friction burn causes the nail bed to become hyper-sensitive to even normal and acceptable levels of warming that normally wouldn't be a concern. The client's natural nails should be gently and carefully filed and not treated roughly while being filed. Also, be sure to apply UV gels in thin layers and cure them with the correct UV nail lamp in order to assure a proper cure. **S**

"Product developers take steps to ensure the UV gel doesn't 'burn like crazy', so excessive heat is an indication that the product has not been properly applied or cured."