The nail plate's surface scratching or denting of 212
for use on brittle or very rigid nails. for weak, thin, flexible nails—they're not breakage. Nail hardeners are usually best and rigidity which leads to brittleness and hardeners may cause excessive hardening to be hard, but not too hard or they become pitted. Healthy nail plates need to be hard, but not too hard or they become very brittle. Nail plates that are too hard also become quite brittle and not particularly strong. Nail plates that become too hard also become very brittle. Nail plates that are too soft are more easily scratched or broken. Our nail plates need to be hard, but not too hard or they become more susceptible to shallow or splitting and splitting. For example, overuse of nail hardeners may cause excessive hardening and rigidity which leads to brittleness and breakage. Nail hardeners are usually best for weak, thin, flexible nails—they're not for use on brittle or very rigid nails.

1 HARDNESS The resistance to scratching or denting of the nail plate's surface

Diamond is the hardest known substance, but is easily cut into smaller stones or faceted into a gem. Why? Diamonds are quite brittle and not particularly strong. Nail plates that become too hard also become very brittle. Nail plates that are too soft are more easily scratched or broken. Our nail plates need to be hard, but not too hard or they become more susceptible to shallow or splitting and splitting. For example, overuse of nail hardeners may cause excessive hardening and rigidity which leads to brittleness and breakage. Nail hardeners are usually best for weak, thin, flexible nails—they're not for use on brittle or very rigid nails.

2 STRENGTH The nail plate's ability to resist breaking under heavy loads or impacts

A bridge must be strong to hold all the crossing cars. In this case, the cars are the “load.” Tree branches must be strong to resist the load created by heavy winds. What would happen to a tree that didn’t bend in strong winds? It snaps! Our nail plates need to be strong enough to resist the loads we put on them by picking, prying, scratching and clawing. All that we do to our natural nails is proof of their strength, but strength alone does not create a healthy nail. Steel is strong, but nails of steel would be too rigid. It's a benefit that nail plates aren't too strong. When the nail plate breaks, it prevents injury to the matrix area where the nail grows. Nail strength is important, but it must be balanced with flexibility.

“Why do nails become brittle, snap or split too easily? When strength or flexibility are too far out-of-balance, then toughness is lost! Nail plates that are too flexible will lose strength. The reverse holds true; if a nail plate becomes too strong, it loses flexibility. Either way this out-of-balance nail plate has lost toughness and is more likely to break or split.”

3 FLEXIBILITY The ability of a nail plate to bend and absorb a load or impact

If the nail plate didn’t bend, most bumps or bumps would result in cracks, breaks or chips. Our bones demonstrate the importance of flexibility. Young children’s bones are highly flexible, but that how breaks, cracking or fracturing are all sign of brittleness. The best way to keep nails tough is to keep their strength and flexibility in balance. You can restore some balance to brittle or overly rigid nails with daily home treatment using high-quality, penetrating nail oil that improves the nail’s flexibility and helps restore toughness. Avoid repeatedly soaking nails in water, since water dramatically increases the nail plate's flexibility and lowers its toughness.

5 WEAR The result of abrasion or rubbing that erodes the nail plate’s surface

As the nail plate! The extreme toughness of a healthy nail plate is one of its most useful properties. Hair has great toughness, but not as much as the nail plate! Healthy hair and nail plates are normally tough...The extreme toughness of a healthy nail plate is one of its most useful properties.

“Why do nails become brittle, snap or split too easily? When strength or flexibility are too far out-of-balance, then toughness is lost! Nail plates that are too flexible will lose strength. The reverse holds true; if a nail plate becomes too strong, it loses flexibility. Either way this out-of-balance nail plate has lost toughness and is more likely to break or split.”

4 TOUGHNESS A balance of strength and flexibility for resistance to breakage

If strength and flexibility are in balance—the result is a tough, durable nail plate. Nylon hair combs or plastic garbage bags are examples of extremely tough, flexible materials that bend or stretch before breaking or tearing. Nails that are rigid, brittle, easily fractured or torn, are showing signs that toughness has been lost. Healthy hair and nail plates are normally tough. Normal nail plates are highly flexible and will bend rather than break. What factors can affect nail flexibility? Age, diet, health, prolonged or repeated exposure to harsh cleaners and solvents, excessive hand washing or moisture, and heat or cold can all affect nail flexibility.

Nails

By Doug Schoon, Chief Scientific Adviser, Creative Nail Design, Inc.

*2 The importance of flexibility is that a nail plate becomes too strong, it loses flexibility. Either way this out-of-balance nail plate has lost toughness and is more likely to break or split.*

*4 Aggressive or heavy-handed filing can quickly wear away the surface of the nail plate by scratching off too many layers. Lower grit files create larger and deeper scratches which lead to thinner and weaker nail plates. Using too much downward pressure while filing increases nail thinning and weakening. When filing the nail plate, the rule should be “do no damage!”*