CUTEK® EXTREME CD50

HIGH PERFORMANCE WOOD OIL FOR ALL EXTERIOR APPLICATIONS



CUTEK[®] Extreme CD50 is a high-performance oil-based wood stabiliser that highlights the natural beauty of wood and extends service life.

CUTEK® Extreme CD50 penetrates deeply into wood to control moisture, and minimise warping, cupping and splitting. Protecting from the inside out, CUTEK® Extreme CD50 will not flake or peel and maintenance is fast and simple – no need to sand or strip.

CUTEK® Extreme CD50 is a high-performance, oil-based wood stabiliser with a unique self healing effect that migrates to any perforated, cut or damaged area, automatically sealing it against the damaging effects of moisture.

Penetrating deeply into timber, CUTEK® Extreme CD50 highlights the natural grain and beauty of wood whilst providing robust and long-lasting protection. CUTEK® Extreme CD50 will not flake or peel and maintenance is fast and simple – there's no need to sand or strip. CUTEK® Extreme CD50 is made in New Zealand for New Zealand conditions. CUTEK® Extreme CD50 diffuses throughout wood to control liquid and gas phase moisture to minimise warping, cupping and splitting. By improving the dimensional stability of wood, CUTEK® Extreme CD50 improves the service life of your timber.

CUTEK® Extreme CD50 enhances the natural beauty, grain and texture of timber. Applied as a clear oil, CUTEK® Extreme CD50 will allow timber to naturally silver over time. Mixing in one of 16 CUTEK® Colourtones will help to enhance and maintain the freshly oiled natural look of your timber or alter your timber colour to meet your design requirements.

WHY CUTEK® EXTREME CD50?

- **Stabilises your wood** Significantly reducing splitting, warping and cupping with a unique self healing effect
- Simple and easy to use No technical experience necessary
- Maintenance is fast and simple No need to sand or strip, just simply clean and recoat
- No flaking or peeling Instead, the coating is designed to fade with time
- **Cost effective** Up to 2x the coverage rate of most wood coatings

- Your timber is the star! Enhances the natural colour and grain of your timber
- **Sustainable choice** Significantly extends the service life of timber
- Long-term, accumulative protection Stays active inside your timber to protect from the inside out
- **CUTEK® cares** We plant one tree for every can of CUTEK® Extreme CD50 sold.
- Made in New Zealand

IMPORTANT INFORMATION

CUTEK® Extreme CD50 is a high-performance, oil-based wood stabiliser. It has been designed to protect timber from the inside out while allowing it to gradually fade over time without peeling, cracking or splitting. CUTEK® Extreme CD50 will penetrate and diffuse deeply into your timber to repel moisture, enhance dimensional stability and improve service life. Anything that might prevent this penetration/diffusion, such as an existing coating (not CUTEK® oil), retained moisture, or insufficient time between coats, must be avoided or corrected before applying CUTEK® Extreme CD50.

CUTEK® Extreme CD50 penetration/diffusion times can vary significantly depending on timber species, ambient temperature, porosity, timber density, weather exposure and moisture content of your timber. Because of the wide range of applications possible for CUTEK® Extreme CD50 and different factors affecting penetration/diffusion time, it is vital that the end user determine the suitability of CUTEK® Extreme CD50 for their specific project by testing a sample area first, especially if speed of drying is important for your project. CUTEK® Extreme CD50 is not suitable for use on food preparation surfaces.

When using CUTEK[®] Extreme CD50, you should avoid:

- Wet wood, or wood with a high moisture content: Your wood should contain a maximum moisture content of 17% as anything higher can significantly delay the penetration process. If this happens, CUTEK® Extreme CD50 may sit on the surface and eventually go tacky without diffusing properly into the timber.
- **Cold weather:** In cold weather, CUTEK[®] Extreme CD50 will become thicker and too much oil may be applied as a result. Warm the oil by placing in a sunny/warm spot before application to make it thinner and enhance penetration.
- Too many coats too soon: CUTEK[®] Extreme CD50 needs to completely diffuse and dry fully before the next coat is applied. Your wood should be completely dry and non-greasy before recoating.
- Existing oil, stain or paint coating on the surface of your wood: Existing film coats may act as a barrier to CUTEK® Extreme CD50 penetration/diffusion. CUTEK® Extreme CD50 must be applied to clean, bare and dry timber, and previous coatings must be properly removed PRIOR to application of CUTEK® Extreme CD50.

Disclaimer

CUTEK® will not accept liability for:

- the application of incorrect colour to any substrate for any reason
- the application of CUTEK® Extreme CD50 to wood with a moisture content greater than 17%
- the application of CUTEK® Extreme CD50 to any substrate with a pre-existing coating

CUTEK® Extreme CD50 contains a small amount of copper salts that may impart a faint green hue on some very light or white coloured timbers. This is more likely to occur in internal applications or in areas not exposed to UV light. For this reason, CUTEK® Extreme CD50 is not usually recommended for internal applications. Some commonly used light coloured timber species used internally where this may be an issue are Pine, Nordic Spruce etc. (list not exhaustive). We have a copper-free product called CUTEK® Euro (available by special order) which is extensively used as an alternative to CUTEK® Extreme CD50 in these instances.

UNDERSTANDING COLOURTONES

It's important to understand that CUTEK® exterior timber oils are a unique penetrating oil system designed to enhance the natural colour and grain of wood. CUTEK® Extreme CD50 is sold as a clear oil which can be used to protect the timber from moisture and moisture related movement such as cupping, warping and splitting. Using just the clear oil will protect the wood, providing stability and structural integrity while allowing it to naturally lighten to produce a silver weathered patina over time. The soft natural lightening and silvering of the wood represents a low care option and is becoming an increasingly popular way to leave wood in weather exposed settings.

Wood projects using clear CUTEK® Extreme CD50 oil that have silvered can easily be returned back to the wood's original colour using CUTEK® Restore and high pressure washing followed by further applications of CUTEK® Extreme CD50 clear oil.

However, if you desire to maintain the original colour of the 'freshly oiled' wood then you need to purchase a CUTEK® Colourtone to add to clear CUTEK® Extreme CD50. It is important that the Colourtone that you choose is suited to your selected wood as it should further enhance the natural colour and grain and help to maintain its "natural" colour over a longer period of time.



What to expect when using Colourtones

Most wood care products on the market leave a build up of material on the surface of the wood. In the short term this provides more colour, but in the long term the finish can be prone to peeling and flaking, which requires time and money to repair.

The CUTEK® system is unique because colour is designed to fade slowly over time rather than peel or flake. New smooth timber that's exposed fully to the weather will lighten faster over the first six months after installation than older, rougher timbers over the same time period. A follow up application of CUTEK® Extreme CD50 Colourtoned oil after the initial six months weathering period will provide much greater Colourtone build and durability as the wood becomes rougher and more absorbent of pigment over time.

How to increase colour build on new wood

New wood is milled smooth and often has a mill glaze which will greatly restrict the initial colour build of any pigment. Better results can be achieved by creating a rougher surface and preparing the wood using CUTEK® Restore in combination with a high pressure washer. Sanding the new wood to 80 grit will give even better results as it removes mill glaze and creates a much rougher surface which will enable higher colour build. Note: The rougher the surface of the wood, the greater the colour build and durability. Rough sawn or heavy brushed wood profiles will take more oil and colour so much bolder colour contrast can be achieved. The amount of mill glaze, if any, that is present on any job can vary significantly depending on species density, and machining method used. Note: Sanded surfaces should be vacuumed or washed thoroughly to remove all loose wood and dust.



Note: These colours are an indication only. Colour may vary depending on many factors including application and the condition and species of timber.

DIRECTIONS FOR USE



SAFETY AND PRECAUTIONS

Before you begin to Prepare and Protect your timber, note the hazards and precautions and ensure that you have obtained and know how to use the correct safety equipment. CUTEK® Extreme CD50 is a hazardous chemical. It is important to refer to the health and safety considerations listed in the Safety Data Sheet (SDS) prior to commencement of your project. When using CUTEK® Extreme CD50 all adjacent surfaces and vegetation must be adequately protected. A full list of precautions and the SDS is available at www.cutek.co.nz

DO NOT SWALLOW

DO NOT USE on surfaces which come into direct contact with foodstuffs.

DO NOT USE on surfaces which come into direct contact with the ground.

STEP 1 PREPARE

Before using CUTEK® Extreme CD50, ensure the wood to be coated is clean, non-greasy and dry (moisture content must be less than 17%). You must appropriately prepare your timber BEFORE applying CUTEK® Extreme CD50.

If you have... NEW TIMBER:

Your timber must be bare, clean and dry before applying CUTEK® Extreme CD50. If your timber presents with surface contaminants such as stains caused by water, iron or tannins, we recommend using CUTEK® Restore prior to application of CUTEK® Extreme CD50.

If you have... OLD, GREYED OR WEATHERED UNCOATED WOOD:

Old, dirty, stained or grey weathered timber should be prepared and restored by first applying CUTEK® Restore which will remove the grey and reinstate the original natural colour, grain and beauty of your wood prior to application of CUTEK® Extreme CD50.

If you have... WOOD PREVIOUSLY COATED WITH A NON-CUTEK® COATING:

CUTEK® Extreme CD50 must be applied to bare, clean and dry wood. This allows the CUTEK® oil to freely penetrate/diffuse into your timber. Wood previously coated with a film forming product such as stains, linseed oil, paint, polyurethane, water-based oils, etc. can inhibit this penetration/diffusion and must be removed first with CUTEK® Wood Stripper and CUTEK® Restore prior to the application of CUTEK® Extreme CD50. In some circumstances complete removal of previous coatings by machine sanding/abrasion can also be a suitable preparation method.

If you have... WOOD PREVIOUSLY COATED IN CUTEK® EXTREME CD50:

Prepare for a maintenance recoat of CUTEK® Extreme CD50 by using CUTEK® Quickclean to remove grease, grime and other dirt from your timber. If maintenance has been neglected for a long period of time and the timber has either greyed, become heavily stained by tannins or iron, or if there is an excessive build-up of CUTEK® Colourtone, use CUTEK® Restore to refresh your timber prior to recoating.

STEP 2 > PROTECT

BEFORE YOU PROTECT: After preparing your timber, it will need to be completely dry prior to coating with CUTEK® Extreme CD50. It is very important that your timber is clean, non-greasy and dry with a moisture content of less than 17%.

WEATHER: Once applied, CUTEK[®] Extreme CD50 generally requires 2-3 days of dry conditions after coating to facilitate full penetration/diffusion and an even colour finish; so check your weather forecast before coating.

COLOURTONE: Clear, un-tinted CUTEK[®] Extreme CD50 will allow your wood to naturally lighten/silver/grey when exposed to sunlight while retaining its protection characteristics. Unless you want a clear finish that will naturally lighten/silver/grey off in a few months, it is important to mix in 1 CUTEK[®] Colourtone per 5 litre of CUTEK[®] Extreme CD50 oil before use.

APPLICATION: Stir the CUTEK[®] Extreme CD50 oil thoroughly (with the added CUTEK[®] Colourtone if desired) before and during use. Make sure you stir from the bottom of the can to ensure active ingredients are properly mixed throughout the oil.

Apply thin, even coats with a brush, paint pad or lambswool applicator. CUTEK®'s Professional Finish - Deck Brush is a good option. TIP: CUTEK® Extreme CD50 works best when applied as a THIN COAT - two or three thin coats on finished wood and hardwoods are much better than one or two thick coats.

For best results, ONE coat of CUTEK® Extreme CD50 should be applied to all faces of the wood prior to installing, with a SECOND coat applied to the top surface once the first coat has completely penetrated/diffused.

DRYING TIME: Unlike traditional wood coatings, CUTEK® Extreme CD50 needs to penetrate/diffuse deeply into your timber. After coating, CUTEK® Extreme CD50 will slowly migrate into your wood to repel moisture, improve dimensional stability and lengthen the service life of your timber. This penetration/diffusion process varies in time for many reasons including differences in timber type (species, density, porosity, age of timber and residual moisture content) as well as environmental factors (temperature, humidity, weather).

Sometimes this drying process can take several days to complete. You will know when your timber is ready for a recoat of CUTEK® Extreme CD50 when it is completely dry and non-greasy. Please note the second coat of CUTEK® Extreme CD50 will take longer to migrate into your timber than the first coat.

CLEAN-UP: Equipment (including brushes) may be cleaned with turps or soap and water. If not correctly cleaned or disposed of, oily rags and other oily materials may cause combustion fires. After use you MUST immediately spread out all oily material outside to dry, by flattening them out to their full size in an airy spot at temperatures above 4 degrees Celsius, or wash them thoroughly with water and detergent and rinse. Remove all oil from all clothes, tools, rags and any other materials contacted during use or as a result of an accidental spill. Ensure wash water is disposed in accordance with local regulations.



COVERAGE

These figures represent typical averages for common decking and cladding species and are to be used as a guideline only.

New hardwoods dressed	10–20m²/litre (400–800sq feet/gallon)
Old restored timber dressed	7–9m²/litre (300–400sq feet/gallon)
New timber rough sawn	7–9m²/litre (300–400sq feet/gallon)
Old restored timber rough sawn	4–7m²/litre (180–300sq feet/gallon)
Shingles and shakes	2–5m²/litre (84–212sq feet/gallon)

MAINTENANCE

With CUTEK[®], maintenance is simple, fast, and cost effective. CUTEK[®] Extreme CD50 will not crack, peel or split, and your wood can be easily rejuvenated or restored using our Prepare and Protect system - no need to sand or strip.

CUTEK[®] Extreme CD50 should be reapplied when the wood is no longer beading water, or as frequently as necessary to retain the natural beauty and colour of the wood.

Typically, horizontal exterior wood surfaces exposed to full weather such as pool decks and handrails will require re-coating more frequently (initially after 6 months, then annually), while other surfaces such as vertical rough-sawn cladding will need recoating less often.

For other hints, tricks and videos on how to use CUTEK® Prepare and Protect products, visit the CUTEK® website: CUTEK.co.nz

