DRYDEN®

WOODOIL THE NATURAL CHOICE FOR YOUR TIMBER

Dryden LVOC WoodOil Data Sheet

Dryden LVOC WoodOil is a low volatile organic compound WoodOil for use on environmental "Green" projects.

Dryden LVOC WoodOil is a water-repellent, non-filming, timber protector. Dryden LVOC WoodOil's water repelling properties help prevent the absorption of water deep into timbers, reducing excessive warping, cupping, and splitting of timber, thus extending the service life of those timbers.

Dryden LVOC WoodOil is a **true migrating oil**. It does not film on the surface, and therefore will not crack, flake or peel.
When applied the timber will weather naturally and silver over time. Added water repellents and a fungicide assist in keeping the timber dimensionally stable.

Dryden LVOC WoodOil is made in New Zealand and specially designed for New Zealand conditions.

Dryden LVOC WoodOil has been specially designed for most timber species, such as softwoods Western Red Cedar, Radiata Pine, Macrocarpa, Larch, Redwood and hardwoods like Purpleheart, Garapa, Vitex, Kwila, Tonka, Rosewood, Iroko and Jarrah, as well as other timber products such as Modified Timbers, Plywood and Laminated Timbers.

It can also be applied to cladding, decking, roofing shingles, fencing, new and old timbers, dressed and bandsawn timbers.

Note: When Dryden LVOC WoodOil is applied, timber in exposed environments will **weather naturally and silver over time**. This means that the natural timber colour will be maintained under covered areas while transitioning out to silver in exposed areas.

Dryden LVOC WoodOil has a Green hue when in the container. This is not noticeable once it has migrated into the timber. Dryden LVOC WoodOil will highlight the timber's natural grains.

Dryden ColourTones

Dryden LVOC WoodOil **cannot be tinted** with Dryden ColourTones as it will not hold the tint and would no longer be LVOC.

Coverage Rates Are Important

Dryden LVOC WoodOil migrates into timbers and does not dry on the surface. Coverage rates are important; if too much is applied at once it will remain wet on the surface as there is no space for oil to migrate.
In most situations, when applied at the correct coverage rate, Dryden LVOC WoodOil will lose its **gloss/wet look** from the face of timber within 24 hours.

Dryden LVOC WoodOil coverage rates and coating times may vary due to seasonal temperature, timber porosity, moisture content, timber type and previous coats applied.

Coverage Rates *(Approximate only)*

Bandsawn Timber 8-10m^2 (low density) per litre
Dressed Timber 10-12m^2 (low density) per litre
Hardwood Timber 12-14m^2 (high density) per litre
Bandsawn Plywood 6-8 m^2 per litre
Restored Timbers 6-8m^2 (low density) per litre

Dryden LVOC WoodOil coverage rates are approximate only and may **need to be adjusted** at times, to match the timber and the timbers ability to accept migration of Dryden LVOC WoodOil. ***Note:*** All gloss/wet look should be gone by the next day.

When applying second coat or a maintenance re-coat, application rates will vary depending on timbers exposure (covered/uncovered etc) and time frame between coats or since last maintained. ***Note:*** All gloss/wet look should be gone by the next day.

Note: Restoration & Refurbished Timbers;
When there is excessive absorption into restored timbers, Dryden recommend a change of application method. This will allow for a lower than normal coverage rate to match the timber porosity, being mindful that the **gloss/wet look** should still be gone by the next day.

Coating Systems

New Exterior: Two coat system
First Coat factory applied, or site applied prior to fixing
Second Coat 30-90 days after fixing

Interior: One coat system
Second coat can be applied ***only*** if required, and only after a minimum 30-90 days post first coat application.

Restoration & Refurbishment: Two coat System
First initial coat followed by second coat 3-6 months after the first coat application.

Note: **Refer appropriate section for full information on coating systems**

Application Tools

Dryden LVOC WoodOil applies easily and rapidly and can be applied by:

Speed brush: Preferred application method. Fine bristled speedbrush. (***Not*** lambskin or long pile speedbrush)
Spray: Use airless spray equipment.
Brush: For uneven or rough surfaces, a wide good quality bristle brush is best.
Roller: Use a medium nap for most timbers.

Timber Preparation

All timbers delivered to site must be protected and covered from rain, environmental grime, concrete, cement dust, metal filings and site contaminants. All coated/uncoated timber must be stored off the ground when not fixed.

Temperature Ranges:
Factory and building site precoating application should be completed in a suitable environment, with adequate lighting, ventilation and with the air temperatures between 12°C and 25°C, humidity <75%. Cool temperatures will cause Dryden LVOC WoodOil to become thicker, slowing the migrating process and remain wet on the surface. Storing Dryden LVOC WoodOil in a warm and dry environment prior to use will assist with migration.

Moisture Content:
Do not apply to exposed timber if rain is expected within 6-8 hours of application. Dryden LVOC WoodOil should only be applied to dry timbers (ideal conditions is dryweather).
Timber moisture content must not exceed 18%.

Substrate Standard:
If any substrate or surface cannot be brought up to the standard that will allow, the coating to perform as specified, then do not proceed until remedial work is carried out.

Preparing Dressed Timber:
Dressed timber **must** be sanded to remove mill glaze prior to application of first coat for better migration into the timber.

Dressed Interior Timber:
Work through the grades of sand paper up to 240 grit sanding linearly along the boards until the desired affect is achieved.
Never sand in small areas, always sand the full length of the timber.
Sanding imperfections will show through Dryden LVOC WoodOil, so care must be taken.
Do not over sand surface as this can create similar characteristics as mill glaze.
Timber should be free from raised or woolly grain, planing burrs or other machining defects.
Remove all sanding dust

Dressed Exterior Timber:
Dressed timber surfaces must be sanded linearly along the timber grain using up to 180 grit paper until desired affect is achieved.
Never sand in small areas, always sand the full length of the timber.
Sanding imperfections will show through Dryden LVOC WoodOil, so care must be taken.
Do not over sand surface as this can create similar characteristics as mill glaze.
Timber should be free from raised or woolly grain, planing burrs or other machining defects.
Remove all sanding dust.

Preparing Bandsawn Timbers:
Thoroughly brush along the direction of the grain to remove dust, loose timber fibres and debris. After brushing, turn over timber and knock several times to ensure all loose fibres fall off.

Protect:
Protect newly coated timber from damage. Take all relevant precautions to protect timbers from sub trade and sources of contamination such as, dust, dirt, aggregate concrete wash, concrete cutting, metal grinding, paint splatter, etc.

Envelope Seal all Exterior Timbers:
All timbers should be coated with Dryden LVOC WoodOil prior to installation or fixing to provide a first coat envelope seal.
All faces, backs, edges and cut ends must be coated.

Restoration & Refurbishment: ***(refer page 6)***
Where timber is heavily weathered, previously coated or showing signs of environmental contamination that require restoration and refurbishment of the timber to bring the surface up to standard prior to applying Dryden LVOC WoodOil.

Application

Check all products supplied prior to starting against specification documents and colour samples.
Dryden LVOC WoodOil must be used as supplied, never add thinners or alter in any way.
Dryden LVOC WoodOil cannot be coloured using Dryden ColourTone tints.
Dryden LVOC WoodOil needs to be stirred regularly.
For projects that require more than one pail, box all pails together.
Coat board's full length linearly and complete individual walls at one time, using good coating practices.
When completed the entire area should be uniform and free from coating defects.
Always apply coating at the correct coverage rate.

NEW BUILDS

First Coat

First Coat Factory Applied
Dryden LVOC WoodOil can be applied by Factory Pre-coaters; their Systems allow Dryden LVOC WoodOil to be coated within a controlled environment delivering an envelope seal to timber profiles, prior to delivery to site.
When timber has been factory coated ensure **all cut ends are coated during fixing**.

First Coat Site Applied
Prior to fixing, a first coat must be applied to all faces and cut ends, to provide an envelope seal.
Dressed timber **must** be sanded to remove mill glaze prior to application of first coat for better migration into the timber.
Timber should be free from raised or woolly grain, planing burrs or other machining defects.
On site coated timber must be racked or laid out on back face, off ground in a clean well vented location for 24 hours at 12^{o}C-25^{o}C, humidity <75%, to allow Dryden LVOC WoodOil to migrate in, free from sub-trade contamination.

Any gloss or wet look must be gone prior to fillet stacking face to face.
Stacked timber must be protected and covered from rain, environmental grime, concrete or cement dust, metal filings and site contaminants. All coated timber must be stored off the ground when not fixed.
When timber has been coated on site, ensure **all cut ends are coated during fixing.**

Note: If for any reason the next day Dryden LVOC WoodOil has not fully migrated into the timber and has a wet/gloss look, gently draw off excess oil by brushing linearly along the length of the board with an unloaded speedbrush. Ensure an even look and finish.

Cut Ends; Dryden LVOC WoodOil

All exterior timber cut ends must be coated prior to fixing with the same product that was used to pre-coat the timber.
When coating cut ends care must be taken not to create lap marks on aesthetic faces.

Note: Do not use Dryden WaxEndSeal to seal these areas.

Exposed Ends; Dryden WaxEndSeal

For Architectural builds with exposed ends, such as beams, posts, screens, use Dryden WaxEndSeal.
Dryden WaxEndSeal is a wax emulsion for sealing exposed ends of timber.
Dryden WaxEndSeal must be applied after appropriate coats of Dryden LVOC WoodOil have been left to migrate for a minimum of 7 days.
Be sure to avoid Dryden WaxEndSeal ***on any aesthetic faces***.

Refer Dryden WaxEndSeal data sheet for further information.

Interior Timber

One coat system. A second coat can be applied ***only*** *if required* after a minimum 30-90 days post first coat application. Applying coats as far apart as possible and **reducing application rates for both coats is also recommended to avoid saturating the timber surface.**
For most unexposed interior timbers such as sills, doors, sarking, and beams Dryden recommend **one initial coat**, and then recoats only as required.

Interior Maintenance:
Recoat Dryden LVOC WoodOil when and if required.

Wipeable Areas:
Dryden LVOC WoodOil **cannot** be applied to timber flooring, shelving, interior flooring, bathrooms and kitchen cabinets or any area that needs wipe or cleanability.

Second Coat

New Timber

Second coat 30 – 90 days after fixing of cladding.

Decking Timber

Second coat prior to winter but not within six months from the application of the first coat.
Dryden LVOC WoodOil **must not be tinted** when coating decking. Timbers will weather naturally to a silver patina.

Note: If for any reason the next day Dryden LVOC WoodOil has not fully migrated into the timber and has a wet/gloss look, gently draw off excess oil by brushing linearly along the length of the board with an unloaded speedbrush. Ensure an even look and finish.

Joinery

Timber frames and sashes can be factory pre-coated using Dryden LVOC WoodOil. Dryden LVOC WoodOil can be applied again after installation has been completed, but not within 30-90 days of the first coat.
Dryden recommend allowing a minimum migration period of 7 days before affixing glass. A prep clean & primer sealer is recommended to be applied directly to Dryden LVOC WoodOil coated timber before using putty or similar.
If using putty or similar, apply the recommended primer to coated timber, according to manufacturer's specifications prior to glazing.

Refer to manufacturers data sheets and specification for primers and procedures.

Compatibility with Other Products

Chemically Treated Timber:
LOSP treated timber (Light Organic Solvent Preservative) must **NOT** be coated until the chemicals & solvents in the treatment process have evaporated from the timber, refer supplied LOSP timber manufacturer's Data Sheet.
H1-H6 Hazard treatment coded timbers are Dryden LVOC WoodOil compatible as long as they **do not** offer water repellence. Please refer to the timber manufacturer's Data Sheet.

Rubber & Butyl Surfaces:
Dryden LVOC WoodOil can affect rubber adhesives and butyl surfaces if not washed/wiped off soon after contact. Dryden LVOC WoodOil applied to wooden shingles does not usually affect the butyl underlay. It is accepted that most of the industry now use non-rubber base glues. Enquiries should be made to the manufacturer. If coating around butyl surfaces, be sure to keep all surrounding surfaces protected and clean during and after application of Dryden LVOC WoodOil.

Preventing Cross Diffusion:
When absorbent materials need to be attached to timber coated with Dryden LVOC WoodOil, 'stripe' the mating surfaces or edges with recommended coats of a compatible primer as recommended by the manufacturer to prevent cross diffusion into the porous substrate.
Dryden recommend regardless of manufacturer's system being used, that all data sheets are read and followed, for their technical requirements and warranties.

Sealants & Adhesives:
Dryden recommend allowing a minimum migration period of 7 days before applying any adhesives or sealants. This ensures that Dryden LVOC WoodOil has migrated well into the timber. Ensure the timber is clean and free of dust or dirt and use an appropriate primer as recommended by the manufacturer.
Refer to sealant & adhesives manufacturer data sheets for technical requirements and warranty information.

Glazing:
Dryden recommend allowing a minimum migration period of 7 days before affixing glass with wooden glazing beads, using putty or similar. This ensures that Dryden LVOC WoodOil has migrated well into the timber. Ensure the timber is clean and free of dust or dirt and use an appropriate primer as recommended by the manufacturer.
Refer to glazing manufacturer data sheets for technical requirements and warranty information.

Hardware:
Do not coat hinges or hardware that cannot be removed. Carefully remove hardware, fixtures and fittings before commencing work. Should product accidently come in contact with hardware clean off immediately.

Timber Compatibility:
Dryden LVOC WoodOil is not compatible with Bamboo or other grasses (Monocotyledons)

Harvesting Rainwater:
Rainwater that comes into contact with timber coated with Dryden LVOC WoodOil is not suitable for drinking.

EXTERIOR MAINTENANCE

Dryden recommend an annual maintenance inspection and soft wash to keep the building in optimum condition. In some circumstances, due to localised environmental conditions soft washing may be required more regularly.

Wash with clean water, using a garden hose or soft brush (such as a car washing brush). A mild detergent solution can be used to remove stubborn contaminants.

First maintenance is determined by the quality of application of first coating, building design, orientation to sun, weather exposure, timber type and grain.

Note: If for any reason maintenance Soft Washes have not been kept up and mould spores have become apparent within the timbers silvered patina, Dryden recommend using a product which will selectively kill mould and lichen on the exterior timber surface over an extended period. Then over time the weathering process will allow the dead growths to naturally erode away without damaging the silver patina.
Do not use bleach-based products.

Refer Dryden LVOC WoodOil Cleaning & Maintenance Guide for full cleaning information.

Thicker Timbers 1 year

Thicker Timbers will require its first maintenance coat **1 Year** from from the completion of the initial coating system.

The shorter relative first maintenance cycle is due to the greater volume of timber requiring a greater amount of oil for protection and durability.

For ongoing durability only one coat of Dryden LVOC WoodOil should be applied up to 3 years after the initial coating system.

Dressed Timber 1 year

Dressed timber require their first maintenance coat at **1 Year** from the completion of the initial coating system to allow for more protection and durability.

This includes garage doors and *all external exposed* timber joinery faces such as frames, sashes and doors.

For ongoing durability only one coat of Dryden LVOC WoodOil should be applied up to 3 years after the initial coating system.

Cladding Timber Dryden LVOC WoodOil - up to 3 years. (high exposure areas maximum up to 2 years first maintenance coat)

When Dryden LVOC WoodOil is re-coated over any silvered timber, it will wet the silver patina and look patchy. This patchiness will revert to the original appearance over time

For ongoing durability only one coat of Dryden LVOC WoodOil should be applied up to ***3 years*** after the initial coating system.

Decking Maintenance

Not within 12 months from completion of the initial coating system.

Maintenance is often best conducted prior to winter.

Maintenance may not necessarily be every year and will depend on the quality of application of first coating, building design, orientation to sun, weather exposure, timber type and grain.

Graffiti Stains

When Dryden LVOC WoodOil coated timbers have been marked with graffiti, a careful light wash on the area with a water blaster on a wide fan setting may be all that is required.

If after cleaning stubborn graffiti is still present, apply a small amount of paint stripper to the affected area (when dry), follow the manufacturers procedures as per data sheet.

Once dry after cleaning re-apply Dryden LVOC WoodOil to affected area.

RESTORATION & REFURBISHMENT

Where timber is heavily weathered, previously coated or showing signs of environmental contamination that require restoration and refurbishment of the timber to bring the surface up to standard prior to applying Dryden LVOC WoodOil.

Refer Dryden LVOC WoodOil Cleaning & Maintenance Guide and Dryden SurfaceCleaner Data sheet for full cleaning information.

Heavily Neglected Weathered Cladding

Heavily neglected weatherboard cladding that has been left to weather and had little maintenance carried out over many years, showing severe stress, (e.g. dryness, cracked and split, badly cupped, protruding nails) will require a strong wash with Dryden SurfaceCleaner prior to coating.

For severely stressed timber Dryden recommend **3-6 months between coats**. This is to allow time for the first coat of Dryden LVOC WoodOil to fully migrate deep within the weatherboard, which will have a softening, relaxing effect on the timbers structure.

This will allow dry weatherboards to relax and 'rejuvenate' (at times flattening boards), enabling protruding nails to be gently tapped in and the weatherboards pulled up tighter on the framing/cavity. This helps to reduce windage and moisture ingress behind the weatherboards.

At times neglected weatherboards may benefit from increasing the time frame between **first and second coat to 9 months** (but no longer than) for restoration work, to allow timber further time to relax and rejuvenate prior to finishing restorations work.

All restoration work must be carried out prior to coating and may include replacement of weatherboards that are not salvageable. **Refer** to a Registered Builder for advice.

Dryden recommend a Strong Wash using Dryden SurfaceCleaner as per maintenance not carried out on time.

Refer Dryden LVOC WoodOil Cleaning & Maintenance Guide and Dryden SurfaceCleaner Data sheet for full cleaning information.

Protruding Nails

Never hit home protruding nails that have walked out over time immediately following first coat application.
Hitting home protruding nails when weatherboards are stressed and dry will result in cracking and splitting of the weatherboards.
This process should be only started after the second coat of Dryden LVOC WoodOil has been applied (3-6 months) and the timber has had time to relax further and become more supple.
Care must be taken when tapping in protruding nails, it is not always possible to fully remove cupping from the neglected weatherboards. Should the weatherboards become tight and provide resistance to being pulled up **stop,** otherwise splitting of weatherboard may occur.

Note: In some circumstance's weatherboards, being a natural product can remain cupped even after coating.

Pre-stained Surfaces

Degraded stains and polyurethane surfaces must be stripped back to bare timber prior to application of Dryden LVOC WoodOil.

Dryden recommend a Strong wash with Dryden SurfaceCleaner to remove degraded loose product.

After a strong wash, inspect the timber surface for any old coating remaining, spot stripping maybe required if not fully removed. ***All coatings must be removed before coating with Dryden LVOC WoodOil.***

Note: Never sand or scrap timber to remove old stains, spot striping may be required. Sanding and or scraping will result in patchy sanding or scraping marks on the timber surface that will show through Dryden LVOC WoodOil.

Dryden recommend **3-6 months between coats**. This is to allow time for the first coat of Dryden LVOC WoodOil to fully migrate deep within the weatherboard.

Note: Never hit home protruding nails that have walked out over time immediately following first coat application.
Refer above Protruding Nails.

Environmental Contamination

Where timber is weathered, or showing signs of environmental grime, mould, watermarks or discolouration, clean with Dryden SurfaceCleaner prior to applying Dryden LVOC WoodOil.
Dryden recommend **3-6 months between coats**. This is to allow time for the first coat of Dryden LVOC WoodOil to fully migrate deep within the weatherboard.

Note: Never hit home protruding nails that have walked out over time immediately following first coat application.
Refer above Protruding Nails

Refer Dryden LVOC WoodOil Cleaning & Maintenance Guide and Dryden SurfaceCleaner Data sheet for full cleaning information.

Completion & Clean Up

Clean Up:
Detergent & hot water or Mineral Turpentine
Clean up with mineral turpentine or hot water and detergent for spray equipment, brushes and clothes.
These also help with over-spray or accidental spillage on unwanted surfaces such as windows; use a wiping rag on smooth surfaces and a brush on rough surfaces.

Remove:
Remove drop sheets, coverings and masking to leave surrounding surfaces and areas clean, tidy and undamaged. Dispose of all materials safely. Do not pour unused Dryden LVOC WoodOil down drain. Unwanted Dryden LVOC WoodOil should be brushed out on newspaper or absorbed with sawdust, then disposed of via waste collection. Disposal of empty paint containers via domestic recycling programs may differ between local authorities. For more information on responsible disposal of paint and packaging visit painttakeback.co.nz.

Protect:
Protect new work from damage. Take all relevant precautions to protect timbers from site work, dust, dirt, aggregate concrete wash, concrete cutting, metal grinding, water blasting, paint splatter, etc.

Technical

Dryden LVOC WoodOil VOC Rating

Dryden LVOC WoodOil has a recorded VOC value of 37g/L (test report 82493A)

Dryden LVOC WoodOil Fire Rating

For fire rating information refer to Dulux Commercial Team by contacting Dulux Customer Services.

Dryden LVOC WoodOil Light Reflective Values (LRV)

Standard Light Reflectance Values cannot be determined for semi-transparent coatings. A transparent coating allows light to pass through and interact with the underlying timber which is why as an observer we can see it. It follows that the colour of the timber being coated as well as the number of coats applied will therefore significantly impact the measured LRV.
Dryden do not offer any LRV data for their products.

Environmental Hazards

Accidental Release Measures:
Clear area of all unprotected personnel. Slippery when spilt. Wear protective equipment. Absorb with sand or soil. Collect and seal in properly labelled drums.

Storage

Before storing box all like for like containers.
Do not store directly on concrete or cold surfaces, or in damp poorly ventilated environments.
Best stored off ground in a well-ventilated area at a consistent moderate temperature.
Plastic containers containing Dryden LVOC WoodOil can flex particularly if stored in conditions that vary constantly in temperature.
Do not use or store near heat or open flame.
Products once opened and stored correctly have a limited storage life approximately 24 months.

Personal Protection Equipment (PPE) Precautions

Always wear appropriate PPE such as protective gloves, eye protection and face protection.
When spraying or in case of inadequate ventilation wear respiratory protection.
Wash skin thoroughly after handling with hot soapy water.

Refer Dryden LVOC WoodOil SDS for detailed information.

First Aid

If poisoning occurs, contact a Doctor or Poisons Information Centre (New Zealand 0800 764 766; Phone Australia 131 126). If medical advice is needed, have product container or label at hand.

SWALLOWED: If swallowed, do NOT induce vomiting. Give a glass of water. Seek medical assistance.

EYE: If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

SKIN: If skin contact occurs, remove contaminated clothing and wash skin thoroughly. If irritation occurs seek medical advice.

INHALED: Remove from contaminated area. Apply artificial respiration if not breathing. Seek medical advice.

For special medical advice and emergencies call NZ 0800 734 607, AUST 1800 033 111

Information

The responsibility for products sold is subject to our standard terms and conditions.
For further information on Dryden LVOC WoodOil refer to the Dryden LVOC WoodOil Cleaning Guide and Dryden LVOC WoodOil SDS.

For additional information contact:
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