DETAILED APPLICATION AND PRODUCT USE INSTRUCTIONS.

UROXSYS MARINE PRIMER CLEAR AND COLOURED

GENERAL

The Uroxsys Marine range is an extremely durable marine coating system suitable for both exterior and interior applications.
The performance of the system is dependant on adherence to the correct application method detailed in the following guide.
We recommend taking some time to study these instructions before commencing to ensure optimal results.

PRODUCT USAGE CALCULATOR

Estimate the job area in square metres and use the figures below to calculate the amount of product required.

IF BRUSHING, BRUSHING AND WIPING, RAGGING OR SPRAYING

Allow at least 100mls (0.1L) per square metre. 1 X 500ml can covers 5 square metres.

NOTE: The quantity of primer required varies depending on timber density/absorbency and the application method.
Hard timbers (Teak) absorb less primer than soft timbers (Oregon).
Brushing the primer on before ragging off the excess will use more primer than applying as you would a rubbing stain but can give a more desirable result.
For the sake of simplicity we recommend obtaining the quantity recommended above which is the maximum amount required regardless of the timber and application method.
If a diluted colour is desired, Marine Primer Clear will be required additionally to the coloured primer.

PRIMER COLOUR SELECTION

MARINE PRIMER CLEAR

The Marine Primer Clear is intended for use indoors, on exterior timber that displays good colour retention characteristics such as Iroko and Teak and on white toned wood such as Maple or Oak.
It can be used on any timber by applicators that do no wish to use the coloured primers or in areas where applying coloured primer is impractical or potentially overly messy. The Marine Primer Clear beneath the Marine Aliphatic topcoat offers far superior timber penetration and natural colour retention over time than the use of Uroxsys Marine Aliphatic applied directly onto timber.
We recommend the use of Marine Primer Clear for interior applications.
NOTE: Even the aesthetics of colour stable timbers are improved upon over time through the application of a coloured primer.

MARINE PRIMER YELLOW, READ AND BROWN

The Marine Primers: Yellow, Red and Brown are intended to be applied to timbers displaying those base colour tones creating very natural looking, extremely stable colour. It simultaneously primes the timber while staining it its own natural colour tone.
Lighter coloured, and more absorbent timbers are mixed 50/50 with Marine Primer Clear to reduce darkening and retain natural appearance. The coloured primers can be intermixed but this should not be necessary.
The coloured primers can be used as a stain via one or more applications to darken timber.

SUGGESTED PRIMER COLOUR SELECTION

Marine Primer Yellow	**Iroko, Teak, Golden toned Oak**
Marine Primer Yellow thinned 50% with Marine Primer Clear	**Spruce, Cedar, Kauri.**
Marine Primer Red	**Mahogany. Kwila (Merbau), Sapele, Jarrah.**
Marine Primer Red thinned 50% with Marine Primer Clear	**Oregon.**
Marine Primer Brown	**Dark Oak, Walnut.**
Marine Primer Brown thinned 50% with Marine Primer Clear	**Light Walnut.**

SURFACE PREPARATION

Any cracks in the timber should be epoxy filled or splined with timber. Radius all edges to ensure that no sharp corners remain. Substrates should be **thoroughly sanded to clean, even coloured timber** working through the sandpaper grades to P150 grit (sanding with the grain using the 150 grit) to provide a keyed surface. Remove all contaminants and previous coating systems. **If bare timber has been saturated with salt water at any stage, wash well with fresh water to remove any salt deposits from the timber grain before commencing sanding.**

CLEANING/DEGREASING RESINOUS TIMBER

Airgun, Vacuum, or brush down well to remove sanding dust from the grain of the timber. On resinous timbers such as Teak and Iroko, wash with a degreasing solvent such as Acetone or Methylated Spirits applied with a brush and removed with paper towels or rags. Some solvent blends contain alcohol which will impair the cure of the product, so ensure the surface is **completely** dry before applying the product; e.g. leave for an hour with good ventilation.
If the timber has been rained or become wet after the final sand, expect water spots to appear. Re-sand with P150 grade paper before commencing.

APPLICATION CONDITIONS

As moisture in the atmosphere causes this product to cure, it needs to be handled differently than a standard varnish! As a rule, high humidity and high temperature accelerate the cure of the product whereas low humidity and low temperature retard the cure. Suitable application conditions 4ºC - 35ºC, Relative humidity 40% - 90%.

LOW TEMPERATURES: Not suitable for use in temperatures less than 4ºC.

LOW HUMIDITY: Not suitable for use in very low humidity atmospheres.

NOTE: As this product cures by the mechanism of moisture in the air (humidity), very low moisture content in the air will lead to lengthy cure times. **Do not use this product in an air-conditioned environment.** If the product is to be applied in an environment where it is suspected that low humidity may inhibit the cure of the product, do a test patch first. The humidity in an environment may be sufficiently increased by hanging wet towels in the vicinity or wetting adjacent surfaces such as floors. Do not directly wet the uncured Marine primer.

HIGH HUMIDITY: Very resistant to high humidity atmospheres.

NOTE: This product is extremely resistant to surface blushing caused by high humidity and damp conditions making it suitable for evening application. **HOWEVER** it should not be used if condensation or rain might contact the product before it cures. If this occurs, the resultant white patches will need to be sanded off before recommencing.

HIGH TEMPERATURES: Do a test patch first if ambient conditions are greater than 35ºC.

FULL SUN: Proceed with caution.

The product can be applied in full sun, however the timber until the timber is fully sealed, bubbles caused by expanding gasses in the timber can be expected. This will ruin the appearance of the coloured primer.
Primer application is best undertaken in the shade, or when the timber has reached full temperature. This is not such an issue with the clear primer as bubbles can be sanded out or popped with a light skim of the brush.

AIRBORNE AND SURFACE CONTAMINATION: Ensure that the environment in which the product is applied is free from all contaminants such as; cleaning products and sprays, polishing compounds, oil products and particularly silicones. If the

product 'pulls back', 'rejects', develops 'fish eyes' or an orange peel texture, check for airborne or surface contamination, sand well and resume. Residual contaminants in a cured coating can cause ongoing application defects.

APPLICATION INSTRUCTIONS

THINNING Does not require thinning. The Uroxsys Marine Primer has been designed to brush/spray excellently out of the can. If for any reason thinning is required, use **Xylene** only. Any alcohols such as methylated spirits will stop the product from curing entirely. **UNDER NO CIRCUMSTANCES THIN WITH UROXSYS MARINE CLEANER.**

DECANTING Decant sufficient product for 20 minutes use into a roller tray or working pot. Seal the original container immediately to **prevent moisture exposure. Screw the cap on fully.** A deep working pot is preferable to one that is broad and shallow to minimise moisture exposure and maximise pot life.
Do not tip unused product back into the can. Wipe the thread or the can if necessary to prevent the cap becoming glued to the can. If the cap does stick, remove with slip-grip pliers. The can should be able to be opened 4 or 5 times without the contents thickening noticeably; if it does thicken or become lumpy, then moisture contamination has occurred and it should not be used.

APPLICATION

MARINE PRIMER CLEAR

Apply by brush, mohair roller or spray to timber saturation. Do not attempt to build a thick film. The excess primer will not require removal with paper towels or rags as it does with the Colour Tone primers. On very deep grained timbers such as Iroko and Wenge, do not attempt to flood-coat the grain. This will need to be filled over successive coats of the Marine Aliphatic topcoat.

MARINE PRIMER YELLOW, RED AND BROWN

Application Method 1.
Apply with a rag, staining cloth or speedbrush as you would a rubbing stain. Make sure that the primer is applied to timber saturation but don't try to build a film. Sticky primer can be worked up with fresh material for 15 minutes or so after application. Wear gloves!
This application method tends to create less mess than the following if brush splatter (on decks etc) is an issue.

Application Method 2.
Ensure a good supply of rags or paper towels are at hand as you'll use alot!
Apply by brush, roller or speed brush. Work in sections applying the primer thinly to saturation, then remove all the excess with paper towels or rags similarly to the application method of Danish Oil. Rub down to the timber surface as you are not trying to build a film. Change the rag or paper towel frequently.
The sections the primer is applied to should be loosely between 0.5 and 1 metre. The objective is to wipe off all the excess primer right down to the timber surface which is the key to the natural appearance. For this reason, you want to work in small enough sections that the excess primer can be removed before the solvents evaporate out at when it will become tacky and unworkable. If this does occur however, sticky primer can be worked up with fresh material for 15 minutes or so after application. The product will remain workable for around 3 minutes, less in breezy conditions so work must be undertaken fairly quickly. Plan the job before commencing.
Do not let any wet edges sit for longer than a few minutes before applying and overlapping the next section of primer. Work in sections right around spars or along cabin-sides for example. Apply and rub off the Colour Tone Primer working with the grain of the timber. Wear gloves!
This application method can be faster and give best aesthetic results but beware of brush splatter!

Application Method 3.
Skilled applicators will be able to spray the primer evenly. Remember to not attempt to build a film. The technique can be combined with rubbing off excess for best results.

USEFUL TIPS **Primer Bleed:** Hardwoods with a deep capillary structure may bleed primer as it cures leaving a spotted effect. This can be wiped off with paper towels prior to the primer curing. Direct sunlight can exacerbate this effect.

Masking tape: It advisable to use plastic making tape around timber areas bordered by paintwork if using the Colour Tone primers. Drips, splatter or bleed under making tape can be cleaned up with MEK, Acetone or Xylene on a rag providing the primer is uncured but may still stain. If completely repainting a boat, it can be useful to undertake work on the brightwork before painting. All but the last coat of Marine Aliphatic can be applied, the painting completed, then the Marine Aliphatic lightly sanded and the final coat applied.

NUMBER OF COATS

One coat only (unless in the circumstances specified below).

More even colouration: On extremely absorbent timbers such as Spruce or Cedar, the surface can be pre-sealed with Marine Primer clear and then Colour Tone Primer (at full strength) applied over the top of this for more even colouration. The excess clear primer should be removed with paper towels or rags and the surface carefully hand-sanded with no less than P400 grit paper at least a day after application taking care not too sand through the coating. The Colour Tone Primer can then be applied over this as stipulated above. This is not necessary, but may be more to the tastes of the applicator.

Darker timber tone: This can be achieved by applying multiple coats of coloured primer at one day intervals. Lightly sand with no less than P400 grit paper between coats.

APPLICATION SCHEDULE FOR COMPLETE SYSTEM

In **optimal** conditions (warm temperature, high humidity), this sequence for exterior application is possible. This time will increase as temperature and/or humidity fall.
Day one: Apply primer.
Day two: Sand primer (if desired), apply 3 coats of Uroxsys Marine Aliphatic Gloss.
Day three: Sand, apply 2 coats of Uroxsys Marine Aliphatic Gloss.
Day four: Sand, apply one coat of Uroxsys Marine Aliphatic Gloss.
Day five (if a matt finish is desired): Sand, apply one coat of Uroxsys Marine Aliphatic Matt.

We recommend that a maximum of 2 coats per day be applied in interior applications.

RECOAT AND REPAIR OF COMPLETE SYSTEM

If the system eventually requires a recoat and the coating is unbroken, lightly sand with P220 grit paper to key the surface, and apply two coats of Aliphatic Gloss or one coat of Aliphatic Gloss followed by one of Aliphatic Matt if a matt finish is desired. If the original film has been broken, feather the edges and build that area up to 6 coats of thickness locally before recoating the entire surface. Use the coloured primer used initially to colour-match the original tone.

CLEANING

For brush or equipment cleaning use Uroxsys Marine Cleaner. Work it well into brushes, give a second rinse and allow to completely dry prior to using. The Marine Cleaner will **completely** stop the Marine Aliphatic from curing. **NEVER THIN THE PRODUCT WITH BRUSH CLEANER** or allow the brush cleaner to combine in any way with the product.

Acetone, Xylene or MEK can also be used for cleaning and will not harm the Marine Primer on contact though it should be remembered that even very small amounts of Uroxsys Marine Primer left on brushes will cause them to harden. These solvents will not neutralise the product. It can be convenient to store brushes in Uroxsys Marine Cleaner or Acetone, Xylene or MEK between jobs – ensure that the Marine Cleaner or solvent is worked well into the brush.
Alternatively wash brushes well in the Uroxsys Marine Cleaner, rinse well a second time in Acetone/Xylene/MEK to flush out the Marine Cleaner and shake out the brush. You can then start work straight away without the brush needing to be dried.
Brushes and rollers can be wrapped tightly in plastic and stored (without requiring cleaning) in a freezer overnight without hardening.
Do not rinse brushes in water prior to use. We do no recommend attempting to clean rollers.

HEALTH AND SAFETY

We strongly recommend using dust masks when sanding and carbon filter masks (or forced air) when applying the product particularly if spraying or using the product in a confined space.

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