

LOWSATIN URETHANE | TECHNICAL DATA SHEET

INTERIOR | EXTERIOR PAINT | ALKYD | URETHANE WATERBORNE ENAMEL **ENVIRONMENTAL LOW IMPACT PAINT PRODUCT FOR HEALTHY INTERIORS**

FIELDS OF APPLICATION

Excellent finish paint for interior and exterior applications on all types of materials. LowSatin Urethane is an alkyd oil paint alternative with exceptionally high UV resistance, high resistance to atmospherically conditions, and is applicable in residential, commercial, marine, and industrial environments. Product can be applied to iron, aluminum, steel, galvanized steel, concrete, tile, glass, all types of caulks, wood, plastic and sheetrock. LowSatin Urethane is a Gloss level 4 finish, which when dried, creates a highly scratch resistant surface, suitable for floors, cabinets, doors, etc., where durability is a priority. LowSatin Urethane is both waterproof and oil proof. This product is a water based urethane paint product providing superior adhesion than typical oil, acrylic, or waterborne paints.

LowSatin Urethane can be used with or without a primer based on pre-existing conditions, type of finish desired and type of material to be painted.

PRODUCT FEATURES

A 100% urethane alkyd paint product, non permeable, provides good anchoring power, with excellent resistance to scratches, water, and oils. Product is diluted with water, has very low odor, easy to apply, mimicking traditional oil or lacquer paints, low drip/paint run ratio, with elastic capabilities suitable for exterior wood surfaces. Product is considered an earth friendly product, ideal for use in homes, schools, and hospitals, and work sensitive areas.

This paint product is an oil proof, washable finish that cannot be damaged by foods, greases, body oils, color crayons or washable colored markers. Cleaning does not change the sheen of the paint. Paint touch-ups are simple but may require whole wall repaints, particularly for sprayed finishes.

LowSatin Urethane is specifically designed to be tinted with natural oxide earth tints and 0% VOC colorants to increase esthetic color values with minimal impact to the environment and to provide toxic free air quality for indoors. LowSatin Urethane is an Environmental Low Impact paint material as described in the Eco Category description.

TYPE OF PRODUCT

Urethane alkyd coating with organic stabilizers.

SHEEN FINISH

Satin

COLOR

White/Transparent Base. Color tint up to 8% max with approved tints for white base, 15% max with approved tints for transparent base. Custom color tint matching available.

TECHNICAL DATA

CRITERIA	INT. STANDARD	VALUE	UNIT
TVOC & VOC (including tint pigments)	2004/42/CE -ISO 11890-2	67	g/l
Surface Retention Smog/Dirt	EN 10795	5	Low
Damp Abrasion Resistance (Gardner Cycles)	UNI 10560	≥ 5000	Excel- lent
Drying Time at Low Temperature	UNI 10793	> 13	°C
Application Quality	UNI 10794	Excellent	-
pH Value	DIN 19266	8 - 8.5	-
Alkaline Resistance	UNI 10795	Yes	-
Specific Gravity (23°C)	EN ISO 2811-2	1.29	g/ml
Gloss Level	UNI EN ISO 2813	22	Semi Opaque
Reaction to Fire	EN 13501-1:2002	A1	Incom- bustible
Toxicity	EN 13501-1:2002	Non-Toxic	-
Scratch Resistance	DIN 68861/81 P4	2.8	-
Surface Hardness	DIN 68861	600	RA (Cycle)
Resistance to Chemical Agents	ONORM A 1605-15 (1B1)	Good	-
Heavy Metal Content Lead and Chrome	2002/95/CE	None	-
Vapor Absorption	UNI 927-4	35%	RMPA
Vapor Release	UNI 927-4	70%	DMP
Vapor Diffusion from Surface	UNI 927-5	> 140	g/m²
Accelerated Aging Resistance	EN 927-3	Good	-
APEO (Alkyl Phenol Ethoxylates)	-	0%*	Low Content
PEG (Polyethylene Glycol)	-	0%*	Low Content
PG (Propylene Glycol)	-	0%*	Low Content
Formaldehyde	-	0%*	Low Content
Biocides	-	0%*	-

Does not contain chemicals that can aggravate or cause asthma, see NIH Asthma Report 2012.

* This product no contains substances classified as hazardous to health or the environment pursuant to the provision of Directives 67/548 CEE and regulation (CE) 1272/2008 (CLP) and subsequent amendments.

APPLICATION CYCLE INSTRUCTIONS BRUSH AND ROLLER APPLICATIONS

1ST COAT: Dilute LowSatin Urethane typically with 10% water, 250 ml to one (1) 2.5-liters bucket, maximum 15% water, 375 ml to one (1) 2.5-liters bucket of LowSatin Urethane. For better coverage and sheen results it is advised to prime surfaces with a universal urethane primer or EcoPrimer Urethane for wood. It



is not advised to use roller application except when necessary, as the roller nap may create an undesirable finish. An appropriate sprayer will use less material and create highly desirable finishes. Hand brush work will create a typical oil paint finish, that reflects visible brush strokes. Allow to dry for at least 4 – 8 hours before applying 2nd coat, if required. 1st coat must be dry before applying 2nd coat. Wash paint brushes immediately with soap and water after completion of use. Do not allow paint brushes to stand outside beyond 5 – 10 minutes. Rinse brushes immediately with water or stand in water during short painting breaks.

2ND COAT: Dilute LowSatin Urethane same as above. A 2nd coat is not necessary usually when using a correctly tinted primer base. Apply paint in an even and constant pattern, so that a perfect coverage is achieved. For repaints with light colors on dark colors, at least 2 finish coats will be required. Metal surfaces that are preprimed will not require a urethane primer, but will require 2 coats for adequate coverage. Handling time after painting varies according to ambient conditions, typical time is 2 – 4 hours for light touching. Allow LowSatin Urethane approximately 72 – 144 hours to achieve complete hardness.

PAINT SPRAYERS

1ST COAT: Dilute LowSatin Urethane typically with 10% water, 250 ml to one (1) 2.5-liters bucket, maximum 15% water, 375ml to one (1) 2.5-liters bucket of LowSatin Urethane. Using a good quality sprayer is imperative. Best results can be achieved using either a compressor siphon feed spray guns, or a high quality airless sprayer for fine finishes, with high and low pressure options. A professional spray application will consume less material and create very desirable finishes and sheens.

2ND COAT: Dilute LowSatin Urethane same as above. A 2nd coat is not necessary usually when using a correctly tinted primer base. If the paint has not been applied in an even and constant pattern to create a perfect coverage, a 2nd coat will be required. 1st coat must be dry before applying 2nd coat. For repaints with light colors on dark colors, at least 2 finish coats will be required. Metal surfaces that are pre-primed will not require a urethane primer, but will require 2 coats for adequate coverage. Handling time after painting varies according to ambient conditions, typical time is 2 – 4 hours for light touching. Allow approximately 72 – 144 hours for paint to achieve complete hardness.

Manufacturer recommends that a universal urethane primer or EcoPrimer Urethane is lightly and carefully sanded to create excellent finish results when spraying LowSatin. Clean all surfaces to be painted carefully before application of final coat with a sprayer. Insure that the area to be painted is free of dust, prior to and after painting for several days.

SPRAY TIP USAGE: Apply paint product with a # 0.011 – 0.013 mm size spray tip for airless sprayers, and for compressor spray guns check with manufacturer. Always use new spray tips for starting a paint job for best results. This will also conserve the amount of paint necessary to complete the job. Note* It is not advised to rest an airless spray gun without use for over 15 minutes without use, as water-based urethane paint may partially dry and clog in spray gun or pistol. If this occurs, flush out sprayer with denatured alcohol or lacquer thinner several times to remove clogged guns or tips, and then flush several times with water to remove solvent cleaning materials. For best spray results and finishes, it is recommended to use a Kremlin Rexson Pump with an Excite spray gun.

MIXING PAINT & WATER

Most of our paint formulas are concentrated and require water to be added to them for proper use. This process means we can sell more coverage in an economical package that decreases the cost for transport, reduces the carbon footprint, helping the your pocket book and the environment.

Mix paint and water with an electric drill and paint paddle, or mix well by hand! If water is sitting on the top of your mixture, the paint is not properly mixed!

Apply with brush, roller or with the an appropriate sprayer and sprayer tip. New sprayer tips should be used to prevent product waste and provide for a more perfect finish.

TOOLS

Apply with brush, roller or with the an appropriate sprayer.

DRYING TIME

Allow a drying time between coats of at least 4-8 hours. With lower temperature and humidity more time may be needed. If sanding is required between coats, drying time permitted may increase -24 hours before light sanding depending on humidity and environmental conditions. Allow 72-144 hours to achieve complete hardness. Product requires 14 days for 100% full curing time.

CONSUMPTION/COVERAGE

Approximately 400 ft² / 37 mt² per 2.5 liters bucket diluted with 250 ml water (10%) when applied by brush. Approximately 530 ft² / 49 mt² per 2.5 liters bucket diluted with 250 ml (10%) water when applied with sprayer. Determine exact consumption by performing a test on the surface to be treated.

PACKAGING

Plastic buckets of 1 and 2.5 liters.

APPLICATION CYCLES ON DIFFERENT TYPES OF BASES

Make sure base is solid, dry and well cleaned, prepared with skill. It is recommended to observe the rule VOB DIN 18 363, Part C, paragraph 3. All exterior painted surfaces should be checked on a regular basis after 4-5 years to ensure that the paint product has remained intact, without damages, cracks, or fading, and if so repaints should be made immediately. After 7-8 years all exterior painted surfaces should be re-painted so as to maintain the quality of the original surface and not permit damage or decay to the urethane paint.

NEW SHEETROCK

Prime all new sheetrock with 2 coats EcoDomus Matte, sanding lightly between coats, using a paint sprayer for application. Allow primer paint to dry for at least 8 hours. Apply 1 coat of EcoPrimer Urethane with a paint sprayer, and allow to dry for at least 4 hours, and then lightly sanding. Remove all dust from area to be painted. Lightly wipe wall surfaces with a damp cloth or tack cloth to remove all traces of dust. Apply LowSatin Urethane according to instructions.

PAINTED SHEETROCK

Lightly sand all surfaces prior to applying 1 coat of EcoPrimer Urethane with a paint sprayer, and allow to dry for at least 4 hours, and then lightly sand. Remove all dust from area to be painted. Lightly wipe wall surfaces with a damp cloth or tack cloth to remove all traces of dust. Apply LowSatin Urethane according to instructions

UNPAINTED WOOD

Sand all wood surfaces as required to provide a smooth surface. Fill all nail and screw holes with non-oil type putty or wood filler. Apply 1 coat of EcoPrimer Urethane with a brush or a paint sprayer, and allow to dry for at least 4 hours. Apply water based caulk as needed to fill all voids and cracks. Paint all caulked areas as needed and allow to dry for at least 12 hours. Lightly sand all surfaces and remove all dust from area to be painted. Lightly wipe wood surfaces with a damp cloth or tack cloth to remove all traces of dust. Apply LowSatin Urethane according to instructions.

LowSatin Urethane can also be applied to any type of wood without using a primer. This component results in a type of architectural/decorative finish, in that it highlights the wood grains inherent in the woods, yet providing the same high quality engineering, with the same quality sheens as is created using a wood primer.

PAINTED WOOD

Sand all painted wood surfaces as required to provide a smooth surface. Fill all nail and screw holes with non oil type putty or wood filler. Apply water based caulk as needed to fill all voids and cracks. Paint all caulked areas as needed and allow to dry for at least 12 hours. Apply 1 coat of EcoPrimer Urethane with a brush or a paint sprayer, and allow to dry for at least 4 hours, then lightly sand. Remove all dust from area to be painted. Lightly wipe wood surfaces with a damp cloth or tack cloth to remove all traces of dust. Apply LowSatin Urethane according to instructions.





It is not a requirement to prime painted wood if the quality of the finish is acceptable to create a perfect finish. LowSatin Urethane will read any non desirable textures existing on the wood surfaces.

STEEL/IRON/GALVANIZED STEEL/ALUMINUM

Sand all metal surfaces to provide a rust free and smooth surface as is possible, previously painted or non-painted. For unprimed metal surfaces, apply 1 coat of LowMetal Urethane and allow to dry for 12 hours. Apply LowSatin Urethane applying with a brush or sprayer as indicated in the instructions above. For exterior metal surfaces, it is advised to apply two (2)-coats of LowSatin Urethane onto primed or painted surfaces. LowSatin Urethane can be painted onto solvent based metal primers, ensuring that such primer is completely dry before painting. On large flat areas it is advised to spray paint all surfaces. For small areas or detail work use a high quality finish paint brush to ensure a smooth a finish.

After 2 years, it is advised to inspect exterior painted metal surfaces, particularly previously painted surfaces that were painted with 'other' types of enamel paint. If rust has appeared, address damaged areas and remove rust as is possible and apply LowMetal Urethane as directed, and then 1 coat of LowSatin Urethane as

For all metal surfaces, it is advised after 4 - 5 years to make careful inspection of interior and exterior painted surfaces and if LowSatin Urethane is beginning to fade, or show signs of distress, or wear, it is advised to prime all areas where the finish surface has been removed by chips, scratches, or damages,

sanding those areas lightly to provide an even surface and apply 1 coat of LowSatin Urethane to reprotect surfaces and provide a new painted finish.

If after 7 - 8 years regardless of the lack of damages, stress, or fading, all exterior painted surfaces should be repainted so as to protect the original painted surface and ensure additional trouble free service of a high quality paint finish.

Clean all surfaces carefully, removing all soap films, mold, dirt, and apply 2 coats LowSatin Urethane directly onto the tile surface. It is advised to apply the paint with a good quality paint sprayer for best results. We do not advise to paint shower walls, enamel tubs or sinks where aggressive cleaning may damage the surface. This application should be used solely as an architectural covering for decorative purposes only.

GLASS

Clean off glass surfaces as required to obtain a clean oil free surface and apply 2 coats LowSatin Urethane directly onto the glass surface. It is advised to apply the paint with a good quality paint sprayer best results.

CAULKS

LowSatin Urethane will adhere to most solvent based caulks, acrylic caulks and some silicone based caulks. Always test product for adhesion verification prior to painting any surface.

PLASTIC

Remove all dirt, oils, glues, as required to provide a clean surface. Lightly sand or steel wool surface as may be necessary to create a slightly opaque surface. Painting preferences will determine method of application. For thicker types of paint applications apply 1 coat of a universal urethane primer, and 2 coats of LowSatin Urethane. For thinner types of paint applications, apply 2 coats of LowSatin Urethane directly onto surface. It is advised to apply the urethane paint with a good quality paint sprayer for best results.

NEW CEMENT STUCCOS

New cement should not be painted for about 28 days to ensure proper anchoring and drying. Apply 1 coat of EcoForte Consolidator diluted 50% (2:1) with water, and allow to dry for at least 12 hours. Apply 1 coat of universal urethane primer and allow to dry for 8 - 12 hours. Apply final paint finish with LowSatin Urethane according to instructions.

DECAYING OR CRUMBLING STUCCOS OR POWDERY SURFACES

Chalking surfaces, which could prevent the proper anchoring of the base coating must be removed and pressure washed. Apply Potassium Silicate Concentrate, diluted 100% with water (1:1) on all damaged surfaces, applying 2 - 3 coats in rapid succession and allow to dry for at least 12 hours. Apply 1 coat of EcoForte Consolidator diluted 50% with water, and allow to dry for at least 12 hours. Apply 1 coat of universal urethane primer and allow to dry for 8 - 12 hours. Apply final paint finish with LowSatin Urethane according to instructions.

COATINGS WITH EFFLORESCENCE

Cement surfaces showing efflorescence should be removed with acid and thoroughly rinsed with water. Apply Potassium Silicate Concentrate, diluted 100% with water (1:1) on all damaged surfaces, applying 2 – 3 coats in rapid succession and allow to dry for at least 12 hours. For coatings on surfaces damaged by the saltpeter or efflorescence no guarantees can be provided. Apply 1 coat of EcoForte Consolidator diluted 50% with water, and allow to dry for at least 12 hours. Apply 1 coat of universal urethane primer and allow to dry for 8 - 12 hours. Apply final paint finish with LowSatin Urethane according to instructions.

AGED CEMENT STUCCOS

When new stucco repairs are performed on older cement stuccos, apply EcoForte Consolidator diluted 50% with water (2:1), to older surfaces prior to applying new cement stucco. Dirty and/or contaminated surfaces should be cleaned and any attached algae removed manually or by mechanical means, i.e., with a highpressure washer. Stucco damaged by algae or mold should be treated with EcoDis. Apply 1 coat of universal urethane primer and allow to dry for 8 - 12 hours. Apply final paint finish with LowSatin Urethane according to instructions.

STUCCO REPAIRS

See Aged Cement Stuccos above.

STORAGE

Store in a cool, dry and protected from frost. Close the open containers with care. Store liquids only in plastic buckets.

WARNING!

Do not apply any products in direct exposure to strong/hot sunlight, rain, high humidity (mist) or in the presence of strong wind. Beware of the danger of frost overnight. If applied by roller or sprayer, protect surrounding surfaces as necessary. Protect eyes and skin from splashes of paint. Cover glass, ceramic, natural stone, brick, metal, wood, painted surfaces and glazed tiles. Clean affected areas immediately with water. Prominent elements of the building (cornices, parapets, etc.,) should be treated with skill, covering flashings, gutters, copper coatings, etc. ...

Do not work in air temperature lower than 13°C / 55°F and not above 31°C / 88°F. Clean work tools with water immediately after use. Keep out of reach of children. In case of contact with eyes and skin, wash immediately with plenty of water. In cases of consumption, consult a Doctor or call the CDC Poison Center.

WATER CONTAMINATION HAZARD

CLASS 1

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of information required by the CPR, and it is classified as a non-hazardous material.

PRODUCT CONTAMINATION HAZARD

CODE CER / NORMATIVE EAC / Decision commuted by the Commission n. 2000/532/CE

NOT DANGEROUS

The directive 75/442/CEE, 08 01 production, disposal, formulation, supply, use, and removal of paints and varnishes: 10 13 04 for removal of paints and varnishes; 10 13 04 disposal of lime and hydrated lime products.





DISPOSAL

Do not enter product in its original concentration into drains or open waters. Do not store at public waste disposal sites. In case of conduction into adapted biological purification plants no disturbances need be expected. The preparation has been estimated by conventional method (Calculated procedure of EG directive 1999/45/EG) and is classified as non-hazardous for the environment.

Dispose according to local regulations. Empty cans should be disposed of according to local regulations; plastic buckets are 100% PBS, no. 5, approved for food storage; 100% recyclable if cleaned thoroughly prior to recycling.

ADDITIONAL INFORMATION

This Technical Sheet lists data collected on the basis of technique and experience. Given the multiplicity of use of the product they cannot be binding and the user can not refrain from using common sense and experience for the individual case. This information shall not constitute any legal obligation and no obligation from the seller or point of purchase, or any agreements inferred by employees who sale this product. Insurance or guarantees issued by our employees or employees should always be confirmed separately in writing. User prior to purchase must verify any information about product adaptability and use of the product. Check the exact consumption of product for the surface where product may be applied to determine amount of products needed. The user must verify the color matching before starting work.

MANUFACTURER

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