



FIELDS OF APPLICATION

LowMetal Urethane is excellent finish paint for interior and exterior applications on all types of materials. LowMetal Urethane is an alkyd oil paint alternative with exceptionally high UV resistance, high resistance to atmospheric 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. LowMetal Urethane is a Gloss level 2 finish, which when dried, creates a highly scratch resistant surface, suitable for all types of metal and non-metal surfaces where durability is a priority. LowMetal Urethane is both waterproof and oil proof. This product is a water based urethane paint product providing superior adhesion than acrylic, or waterborne paints.

LowMetal Urethane is specifically designed to create a cast iron finish, creating a mica effect, ideal for designer quality upper-tier finishes, and is 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. LowMetal Urethane is an Environmental Low Impact paint material as described in the Eco Category description.

LowMetal Urethane is a primer anti-rust inhibitor, used both for new and older metal structures, and as final finish paint.

PRODUCT FEATURES

LowMetal Urethane is a thick coat metal protection paint for priming, intermediate and final coats on ferrous and non-ferrous metals, hot dipped steel components and non-anodized aluminum.

LowMetal Urethane provides excellent adhesion on ferrous and non-ferrous metals. Double acting corrosion protection through inclusion of special anti-corrosive pigments and fillers. Scale-shaped fillers prevent quick diffusion and active pigments slow down the start of corrosion on metal surfaces. The thixotropic properties provide very high dry film thickness on vertical surfaces and on edges. This protective property creates a surface with more or less texture when used on larger surfaces, depending on the application process and conditions.

LowMetal Urethane can be applied on almost any type of non-metal surface, creating a unique special effect paint finish that offers a dynamic and dimensional effect, yet providing durability and performance.

A 100% urethane alkyd paint product, non permeable, provides good anchoring power, with excellent resistance to scratches, water, and oils. Product is concentrated and requires dilution 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 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.

TYPE OF PRODUCT

Urethane alkyd coating with organic stabilizers composed of aluminum mica particles.

SHEEN FINISH

Flat/Satin, Gloss Level 2.

COLOR

Silver Base. Color tint up to 8% max with approved tints. Custom color tints matching are available.



TECHNICAL DATA

CRITERIA	INT. STANDARD	VALUE	UNIT
TVOC & VOC (including tint pigments)	2004/42/CE – ISO 11890-2	5.47	g/l
Surface Retention Smog/Dirt	EN 10795	> 15	High
Damp Abrasion Resistance (Gardner Cycles)	UNI 10560	≥ 5000	Excellent
Drying at Low Temperature	UNI 10793	Yes	-
Application Quality	UNI 10794	Excellent	-
pH Value	DIN 19266	7	-
Alkaline Resistance	UNI 10795	Yes	-
Specific Gravity (23°C)	EN ISO 2811-2	1.3	g/ml
Gloss Level	UNI EN ISO 2813	> 5	Semi Opaque
Reaction to Fire	EN 13501-1:2002	A1	Incombustible
Toxicity	EN 13501-1:2002	Non-Toxic	-
Scratch Resistance	DIN 68861/81 P4	3	-
Surface Hardness	DIN 68861	800	-
Resistance to Chemical Agents	ONORM A 1605-15 (1B1)	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 LowMetal Urethane typically with 10% water, 250 ml to one (1) 2.5-liter bucket, maximum 15% water, 375 ml to one (1) 2.5-liter bucket of LowMetal Urethane. Always test coverage with minimal dilution prior to adding additional water. For better coverage and sheen results it is advised to prime surfaces with EcoPrimer Urethane, a universal urethane primer, for masonry surfaces, wood or sheetrock. When using a tinted primer base, one (1)-application of LowSatin Urethane may be sufficient for a finish coat. It is not advised to use roller application except when necessary, as the roller nap may create an undesirable finish. In such cases it is recommended to a neoprene type roller cover. An appropriate sprayer will use less material and create highly desirable finishes. Hand brushwork will reflect visible brush strokes. Apply paint in an even and constant pattern, so that a perfect coverage is achieved. Allow to dry for at

least 8 – 12 hours before applying 2nd coat. Wash paint brushes immediately with soap and water after completion of use. Do not allow paintbrushes to stand outside beyond 5 – 10 minutes. Rinse brushes immediately with water or stand in water during short painting breaks. Product is usually tack free within 4 – 8 hours depending on humidity and temperature. Product will dry within 24 hours. When possible, allow LowMetal Urethane approximately 72 hours drying time to permit proper handling and transport. Allow 14 days to achieve maximum durability.

2ND COAT: Allow 24 hours of drying of 1st coat before applying a 2nd coat. Dilute LowMetal Urethane same as above. Apply paint in an even and constant pattern, so that a perfect coverage is achieved. For repaints with LowMetal Urethane using light colors on dark colors, 2 finish coats may be required. Product is usually tack free within 4 – 8 hours depending on humidity and temperature. Product will dry within 24 hours. When possible, allow LowMetal Urethane approximately 72 hours drying time to permit proper handling and transport. Allow 14 days to achieve maximum durability.

PAINT SPRAYERS

1ST COAT: Dilute LowMetal Urethane typically with 10% water, 250 ml to one (1) 2.5-liter bucket, maximum 15% water, 375 ml to one (1) 2.5-liter bucket of LowMetal Urethane. Always test coverage with minimal dilution prior to adding additional water. For better coverage and sheen results it is advised to prime surfaces with EcoPrimer Urethane, a universal urethane primer, for masonry surfaces, wood or sheetrock. When using a tinted primer base, one (1)-application of LowMetal Urethane may be sufficient for a finish coat on nonmetal surfaces. Apply paint in an even and constant pattern, so that a perfect coverage is achieved. Using a good quality sprayer is imperative. Best results can be achieved using either a compressor siphon feed spray gun, a gravity spray gun with 4 – 5 bar pressure, 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. Product is usually tack free within 4 – 8 hours depending on humidity and temperature. Product will dry within 24 hours. When possible, allow LowMetal Urethane approximately 72 hours drying time to permit proper handling and transport. Allow 14 days to achieve maximum durability.

2ND COAT: Allow 24 hours of drying of 1st coat before applying a 2nd coat. Dilute LowMetal Urethane same as above. A 2nd coat may not be necessary usually using a correctly tinted primer base when applying on non-metal surfaces. For repaints with LowMetal Urethane of light colors on dark colors, a 2nd coat may be required. Product is usually tack free within 4 – 8 hours depending on humidity and temperature. Product will dry within 24 hours. When possible, allow LowMetal Urethane approximately 72 hours drying time to permit proper handling and transport. Allow 14 days to achieve maximum durability.

Clean all surfaces to be painted carefully before application of coat with a sprayer. Insure that the area to be painted is free of rust, grease and dust, prior to painting.

SPRAY TIP USAGE: Apply paint product with a titanium tip no. 1.2 mm size spray tip for airless sprayers, and a titanium no. 2.0 mm spray tip for compressor spray guns. Always use new spray tips for starting a paint job for best results. Test spray capacity of spray tip before starting production work. This will also conserve the amount of paint necessary to complete the job. Note* It is not advised to rest compressor fed spray gun without use for over 15 minutes 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.

TOOLS

Apply with brush, roller, or with an appropriate sprayer and sprayer tip. New sprayer tips should be used to prevent product waste and provided for a more perfect finish. A titanium spray tip should be used when large areas will have to be covered.

DRYING TIME

Allow a drying time between applications of coats of at least 8 – 12 hours. Product is usually tack free within 4 – 8 hours depending on humidity and temperature. With lower temperature and humidity more time may be needed. If sanding is required between coats, allow 24 hours of drying prior to sanding. When possible,

allow 72 hours to permit proper handling and transport after application of final coat. Allow 14 days to achieve maximum durability. Ideal temperature for application is between 13°C / 55°F – 27°C / 80°F.

CONSUMPTION/COVERAGE

Approximately 65 ft² – 85 ft² / 6 – 8 m² per 1 liter bucket diluted with 10% – 15% water, 2 coats. 130 ft² – 170 ft² per 1 liter bucket diluted with 10% – 15% water, 1 coat. US Gallon equivalent coverage 490 ft² – 630 ft² for 1 coat coverage. Determine exact consumption by performing a test on the surface to be treated.

PACKAGING

Plastic buckets 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.

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. Apply LowMetal Urethane applying with a brush or sprayer as indicated in the instructions above. For exterior metal surfaces, it is required to apply two (2)-coats of LowMetal Urethane onto all surfaces. LowMetal 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 paintbrush to ensure a smooth finish. Product cannot be applied to anodized aluminum surfaces.

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 spot prime as necessary with LowMetal Urethane, and then at least 1 coat of LowMetal Urethane as directed above.

For all metal surfaces, it is advised after 4 – 5 years to make careful inspection of interior and exterior painted surfaces and if LowMetal Urethane is beginning to fade, or show signs of distress, or wear, it is advised to spot 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 LowMetal Urethane to re-protect 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.

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 one (1)-coat of EcoPrimer Urethane with a paint sprayer, and allow to dry for at least 8 – 12 hours, 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 LowMetal 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 8 – 12 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 LowMetal Urethane according to instructions.

UNPAINTED WOOD INTERIOR ONLY

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 8 – 12 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 LowMetal 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 excellent adherence with the same high quality engineering. Two (2)-coats will be required.

PAINTED WOOD INTERIOR ONLY

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 8 – 12 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 LowMetal 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. LowMetal Urethane will read any non-desirable textures existing on the wood surfaces.

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 EcoPrimer Urethane and allow to dry for 8 – 12 hours. Apply final paint finish with LowMetal 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 and allow to dry for at least 12 hours. Product is an excellent consolidator for Natural Cement Stuccos, NHL 3.5, NHL 5.0 and etc., that have been applied on previous historical buildings. 2 Coats should be applied in such cases. Apply 1 coat of EcoForte Consolidator diluted 50% with water, and allow to dry for at least 12 hours. Apply 1 coat of EcoPrimer Urethane and allow to dry for 8 – 12 hours. Apply final paint finish with LowMetal 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 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 LowMetal Urethane and allow to dry for 8 – 12 hours. Apply final paint finish with LowMetal 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 high-pressure washer. Stucco damaged by algae or mold should be treated with EcoDis. Apply 1 coat of LowMetal Urethane 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.

TILE

Clean all surfaces carefully, removing all soap films, mold, dirt, and apply 1 coat of EcoPrimer Urethane directly onto the tile surface. Allow to dry for 8 – 12 hours and light sand if needed. Apply 2 coats of LowMetal Urethane according to instructions above. It is advised to apply the paint with a good quality paint sprayer for best results. It is not advised 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 1 coat of EcoPrimer Urethane directly onto the glass surface. Allow to dry for 8 – 12 hours and light sand if needed. Apply 2 coats of LowMetal Urethane according to instructions above. 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 waterbased 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. Apply 2 coats of LowMetal Urethane according to instructions above. It is advised to apply the LowMetal Urethane with a good quality paint sprayer for best results.

STORAGE

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

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 that are not to be painted. 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. 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 (see Safety Data Sheet).

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

ATTENTION!

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 cannot 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. Any information about product adaptability and use of the product, must be verified by user prior to purchase. Check the exact consumption of product for the surface where product may be applied to determine amount of products needed. The color matching must be verified by the user before starting work.

MANUFACTURER

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