

Technical Data Sheet

Transparent coating in HDP 1L / 2L & PUR-PA 1L / 2L

Version 2021-2

HDP & PUR-PA transparent coatings are used in product brand **AluNatur**

Substrate & pre-treatment						
Width	≤ 1600 mm					
Thickness aluminium	Depends on alloy and hardness. Most used alloys: Transparent Lacquering: 0,3 - 1,5 mm Brushed: 0,5 – 1,5 mm					
Pre-treatment	Green chromate conversion					
Substrate (alloy/ temper)	3005, 5754 (H4x) / other alloys & hardness on req. EN 573-3					
Front side finish		EN 1396				
Resin chemistry	HDP or PUR / PA					
Film thickness (2L= 2 Layers)	1L	2L	3L	4L		
	16-21 µm	30-40 µm	-	-		
	EN 13523-1					
Colour match <i>Note: Transparent coatings show the aesthetics of the aluminium substrate. Any surface imperfection and the colour of the substrate influence the colour. Comparison to the Euramax standard is only valid for 3005 alloy. Furthermore, AluNatur is delivered in Living Grade and Fine Grade having different colour tolerances.</i> General visual appearance Observed and inspected from 5 meter distance at an angle of 90° to the painted sheet.	Fine Grade ΔE (cmc) ≤ 3 Against electronical standard ByK Mac i23 at 45° ΔE (cmc) ≤ 1 Within one delivery Free from visible flow lines, streaks and other imperfections EN 13523-3		Living Grade ΔE (cmc) ≤ 4 Against electronical standard ByK Mac i23 at 45° ΔE (cmc) ≤ 2 Within one delivery Coating can contain flow lines, streaks and other imperfections - Longitudinal streaks max. 20 running meters - Diagonal streaks max. 10 running meters - Repeating stains > 50mm max. 3x in 20 running meters EN 13523-3			
Nr. of layers	1L	2L	3L	4L		
Fire classification	A1	A1	-	-		
	EN 13501-1					
Specular gloss	≤ 60 gloss units - PUR-PA resin ≥ 60 gloss units - HDP resin (tolerance acc. to EN 1396 Table 3) EN 13523-2					
Pencil hardness	≥ H EN 13523-4					
Adhesion	≤ GT1 EN-ISO 2409					
Adhesion + rapid deformation indentation	≤ GT1 EN 13523-6					
Resistance to cracking on bending (T-Bend test on non-embossed material) ⁽¹⁾	Temper	≤ H44	H46	H48		
		≤ 1,5T	≤ 2,0T	≤ 2,5T		
	EN 13523-7					
Resistance to MEK solvent (rubbing test)	≥ 100 double rubs EN 13523-11					

Durability according to testing		
Colour and gloss retention on xenon exposure ⁽²⁾	$\Delta E(\text{cmc}) \leq 3$ $\geq 70\%$ gloss retention ISO 16474-2 500 hours	
Humidity resistance	Blistering <B2 (S2) ISO 6270-1 1000 hours	
Filiform corrosion resistance	Class 1 Under creep longest filament : ≤ 8 mm ISO 4623-2 1000 hours	
Resistance to acetic salt spray fog	Class 1 Under creep average : ≤ 4 mm No blistering EN 13523-8 500 hours	
Resistance to fluorescent UV light and water condensation	R_{UV2} $\Delta E(\text{cmc}) \leq 3$ $\geq 70\%$ gloss retention EN 13523-10 500 hours	
Durability according to outdoor exposure		
Outdoor corrosion resistance	Class 1 Under creep average : ≤ 8 mm EN 13523-21 2 years 90° North Seaside Bohus-Malmö	
Colour and gloss retention on natural weathering ⁽²⁾	$\Delta E \leq 3$ $\geq 70\%$ gloss retention EN 13523-21 2 years 45° South Florida	
Resistance to chalking on natural weathering ⁽²⁾	$\leq 10\%$ EN 13523-21 2 years 45° South Florida	
Warranty indication (final warranty upon request)		
Technical warranty ⁽³⁾	Non coastal areas: 20 years Coastal areas ⁽⁴⁾ : not granted	
Aesthetical warranty	Not granted	
Important remarks		
Transparent coatings or AluNatur coatings are material, batch and paint directional sensitive. Material for a building project has to be ordered in one batch and always be installed in the same paint direction. AluNatur coatings are not suitable and should not be applied under the following conditions: • Application in coastal areas (≤ 1.500 m from saltwater) • Application in heavy industrial / corrosive environments (chemical industry / airports etc.) • Application in geographical zone C⁽⁵⁾ (between 30° Northern Latitude and 30° Southern Latitude) • In combination with embossing		

⁽¹⁾ The minimum flexibility depends on the coated substrate

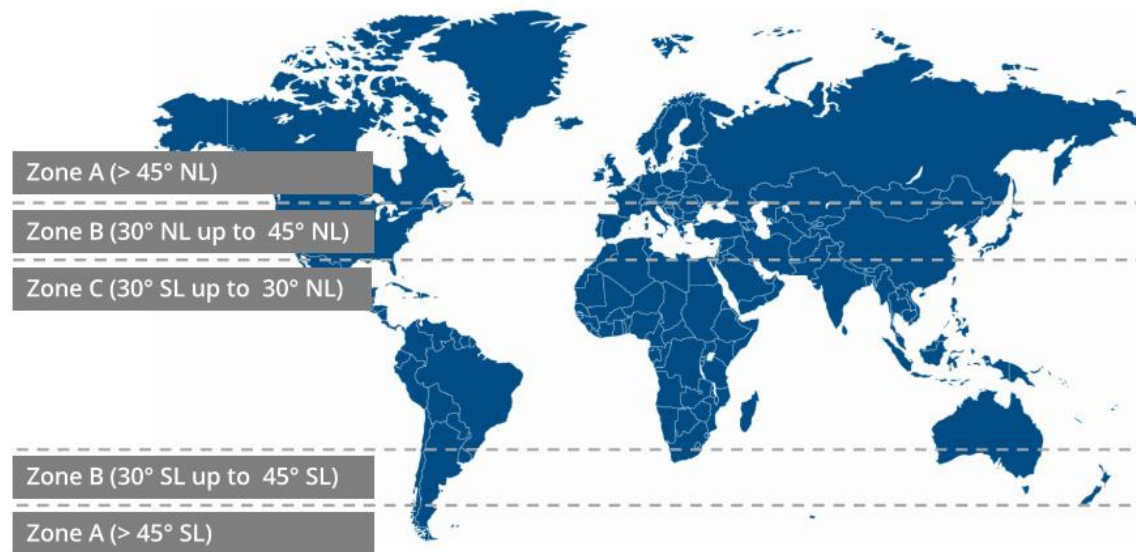
⁽²⁾ Indicative values only. The UV durability performance will depend on the colour saturation/ type

⁽³⁾ The original paint surface that is directly exposed to the elements will not peel, blister, chip, check or crack (except for the minor cracking that may occur on edges or break bends at the time of fabrication) over more than 5% of the total surface over the technical warranty period. The technical warranty value will be equivalent to a maximum of 100% of the purchase price according to Euramax Coated Products terms and conditions

⁽⁴⁾ Coastal areas are located within 1.500 meter from a saltwater environment. We URGENTLY advice to refrain from application of HDP or PUR-PA transparent in coastal areas. In order to see the metal substrate through the transparent coating, there is no primer applied in this coating. This has a major impact on the corrosion resistance in saltwater environments!

⁽⁵⁾ See Appendix A for details on geographical warranty zones

Appendix A: Geographical warranty zones depending on Northern Latitude (NL) and Southern Latitude (SL)



Zone A: All countries situated > 45° NL and > 45° SL (e.g. Scandinavia, Great Britain, the Netherlands, Belgium, France, Switzerland, Austria, Germany)

Zone B: All countries situated between 45° and 30° NL and between 45° and 30° SL (e.g. France, Portugal, Spain, Italy, Greece, Turkey)

Zone C: All countries situated < 30° NL and < 30° SL (e.g. Guadeloupe, Cameroon, Saudi Arabia, Oman)