

AURA Technical Data Sheet (1)

Characteristics	Test Method	Tested Value	Required Value
Thickness	EN 438-2 section 5 HGS(1) , CGS(2)	According to the required thickness	$0.9 \leq t < 2.0 \text{ mm} : \pm 0.10 \text{ mm}$ $2.0 \leq t < 3.0 \text{ mm} : \pm 0.20 \text{ mm}$ $3.0 \leq t < 5.0 \text{ mm} : \pm 0.3 \text{ mm}$ $5.0 \leq t < 8.0 \text{ mm} : \pm 0.4 \text{ mm}$ $8.0 \leq t < 12.0 \text{ mm} : \pm 0.5 \text{ mm}$ $12.0 \leq t < 16.0 \text{ mm} : \pm 0.6 \text{ mm}$ $16.0 \leq t < 20.0 \text{ mm} : \pm 0.7 \text{ mm}$ $20.0 \leq t < 25.0 \text{ mm} : \pm 0.8 \text{ mm}$ $25.0 \leq t : \text{According To Agreement customer / producer}$
Density	ISO 1183 - 1	1.42 gr/cm ³	Min. 1.35 gr/cm ³
Wear Resistance	EN 438-2 section 10 HGS(1), CGS(2)	IP = 350 Rev.	Initial Point $\geq$ 150 Rev.
Scratch Resistance	EN 438-2 section 25 HGS(1), CGS(2)	2 N	Flat Surface Min. 2 N
Surface Quality	EN 438-2 Section 4 Dirt , Spots and similar surface defects Fibers , Hairs and scratches	$\leq 2 \text{ mm}^2/\text{m}^2$ $\leq 20 \text{ mm}^2/\text{m}^2$	$\leq 2 \text{ mm}^2/\text{m}^2$ $\leq 20 \text{ mm}^2/\text{m}^2$
Gloss Level @ 60°	ISO 2813	---	---
Color Difference(5)	ISO 7724 Gentas Internal Standard®	Uni Colors : $\Delta E \leq 1.0$ Printed Designs : No Visual Difference	--- ---
Micro Scratch Resistance	EN 16094-2012	MSR-B3 MSR-B1	---

AURA Technical Data Sheet (2)

Characteristics	Test Method	Tested Value	Required Value
Impact Resistance	EN 438-2 Small Ball section 20 HGS ⁽¹⁾ $0.9 \leq t < 2.0$	25 N	Min. 20 N
	Big Ball section 21 CGS ⁽²⁾ $2.0 \leq t < 6.0$ mm $t \geq 6.0$ mm	No Crack , 4.5 mm No Crack , 3.5 mm	1400 mm height : no crack , 10 mm Max. 1800 mm height : no crack , 10 mm Max.
Resistance To Crazing (20 Hours @ 80°C)	EN 438-2 section 24 CGS ⁽²⁾	Level 5	Min. Level 4
Resistance to Dry Heat at 180°C	EN 438-2 section 16 HGS ⁽¹⁾ , CGS ⁽²⁾ Other Surface Finish	Level 5	Min. level 4
Resistance to Water Vapor	EN 438-2 section 14 HGS ⁽¹⁾ , CGS ⁽²⁾ Other Surface Finish	Level 5	Min. level 4
Resistance to Immersion in boiling water	EN 438-2 section 12 HGS ⁽¹⁾ CGS ⁽²⁾ Other Surface Finish Appearance	Level 5 1 % 0.3% Level 4	Minimum Level 4 Max. 5% in weight Max. 2% in thickness Min. Level 4
Resistance to Cigarette Burn	EN 438-2 section 30 HGS , CGS	Level 4	Min. level 3
Resistance to Chemicals	SEFA 8-1999	See attached Table	---

AURA Technical Data Sheet (3)

Characteristics	Test Method	Tested Value	Required Value
Resistance to Staining	EN 438-2 section 26 HGS ⁽¹⁾ , CGS ⁽²⁾ Group 1 + 2 Group 3	Level 5 Level 5	Min. level 5 Min. level 4
Flatness	EN 438-2 section 9 CGS ⁽²⁾ 2.0 ≤ t < 6.0 mm 6.0 ≤ t < 10.0 mm t ≥ 10.0 mm	1.23 mm 1.46 mm 1.87 mm	Max. 8 mm / 1 M length Max. 5 mm / 1 M length Max. 3 mm / 1 M length
Light fastness	EN 438-2 section 27 HGS ⁽¹⁾ , CGS ⁽²⁾ Grey Scale	Level 5	Min. level 4
Fire Classification(3)	EN 13501-1 6.0 ≤ t < 10 mm CGF ⁽²⁾	B s1 d0	B s2 d0
Dimensional stability at elevated temp. (70°C)	EN 438-2 section 17 CGS ⁽²⁾ 2.0 ≤ t ≤ 5.0 mm t ≥ 5.0 mm	L : 0.22 mm W : 0.35 mm L : 0.18 mm W : 0.23 mm	L : Max. 0.4 mm W : Max. 0.8 mm L : Max. 0.3 mm W : Max. 0.6 mm
Tensile Strength	EN ISO 527 – 2 CGS	85 MPa	Min. 60 MPa
Flexural Strength	EN ISO 178 CGS ⁽²⁾	114 MPa	Min. 80 MPa
Flexural Modulus	EN ISO 178 CGS ⁽²⁾	16,522 MPa	Min. 9000 MPa
Coefficient Of Linear Thermal Expansion (COTE)	ASTM D696-08 ⁽³⁾ CGS ⁽²⁾ 6 mm	6.0 x 10 ⁽⁻⁶⁾ mm / mm °C	---

AURA Technical Data Sheet (4)

Characteristics	Test Method	Tested Value	Required Value
Thermal Conductivity	ASTM C 518 CGS ⁽²⁾ 6 mm	0.416 W/mK	---
Electrostatic Property	EN 61340-4-1 HGS ⁽¹⁾ , CGS ⁽²⁾ Surface Resistance (Rs)	$R_s \geq 1 \times 10^9 \Omega$	---
Total Volatile Organic Compound Emission	ASTM D5116 6 mm	$< 0.010 \text{ mg/m}^2/\text{hr}$	$< 0.5 \text{ mg/m}^2/\text{hr}$
Total Migration of materials in contact with food	Food Contact Materials Regulation (EC) 1935/2004	Test report No. 0003165598/30 AZ 222179 TÜVRheinland ⁽⁴⁾	Pass According to (EC) 1935/2004
Release of PCP (Penta Chloro Phenol)	Intertek PV_C_01.01.02_02-08 (2014-01)	N.D. (Not Determinable)	0.1 mg/kg

Remarks :

(1) HGS = Horizontal Grade Standard Laminate

(2) CGS = Compact Grade Standard Laminate

(3) FR grade CGF is produced only upon customer request

(4) Test report available upon request

(5) The Color Difference refers to the color deviation from the master sample as agreed between Gentas and the customer per batch size (Refer to project batch size).

(6) Gentas internal test method for evaluation of color difference in plain color design. As part of Gentas quality test , The color difference is evaluated and can be guaranteed according to the claimed value . Any other color testing method and/or tested value will not be acceptable by Gentas and can not be the base to any claim .

(7) Available designs AU01 – Black Velvet & AU02 – White Satin

AURA Chemical Resistance According To SEFA 8-1999 (Ref. 2006)

Test No.	Chemical Reagent	Test Method ^{(A),(B)}	Test Result ⁽³⁾
1	Amyl Acetate	A	0
2	Ethyl Acetate	A	0
3	Acetone	A	1
4	Alcohol , Butyl	A	0
5	Alcohol , Ethyl	A	0
6	Alcohol , Methyl	A	0
7	Benzene	A	0
8	Chloroform	A	0
9	Dichloroacetic Acid	A	0
10	Dimethylformamide	A	0
11	Formaldehyde , 37%	A	0
12	Furfural	A	2
13	Gasoline	A	0
14	Methyl Ethyl Ketone	A	0
15	Methylene Chloride	A	0
16	Methyl Isobutyl Ketone	A	0
17	Mono Chlorobenzene	A	0
18	Naphtalene	A	0
19	Phenol , 90%l	A	0
20	TetraHydroFurane (THF)	A	0
21	Toluene	A	0
22	Trichloroethylene	A	0
23	Xylene	A	0
24	Acetic Acid , 98%l	B	1
25	Alcohol , Butyl	B	0

AURA Chemical Resistance According To SEFA 8-1999 (Ref. 2006)

Test No.	Chemical Reagent	Test Method ^{(A),(B)}	Test Result ⁽³⁾
26	Ammonium Hydroxide , 28%	B	0
27	Chromic Acid , 60%	B	0
28	Ferric (III) Chloride 10%	B	0
29	Formic Acid , 90%	B	0
30	Hydrochloric Acid , 37%	B	0
31	Hydrofluoric Acid , 37%	B	0
32	Hydrofluoric Acid , 48%	B	0
33	Hydrogen Peroxide , 3%	B	0
34	Hydrogen Peroxide , 30%	B	0
35	Iodine Tincture	B	1
36	Methylene Blue 1%	B	2
37	Methyl Violet 2B 1%	B	2
38	Nitric Acid , 30%	B	2
39	Nitric Acid , 70%	B	2
40	Phosphoric Acid , 85%	B	0
41	Potassium Permanganate 5%	B	0
42	Silver Nitrate , Saturated	B	0
43	Sodium Hydroxide , 10%	B	0
44	Sodium Hydroxide , 40%	B	0
45	Sodium Hypochlorite 16%	B	0
46	Toluene	B	0
47	Sulfuric Acid , 33%	B	0
48	Sulfuric Acid , 77%	B	0
49	Sulfuric Acid , 96%	B	0
50	Sulfuric Acid 77% and Nitric Acid 70% Equal Parts	B	2
51	Zinc Chloride , Saturated	B	0

AURA Chemical Resistance According To SEFA 8-1999 (Ref. 2006)

Remarks :

- (1) **Method A :** Saturate a cotton ball with the chemical reagent . Place the saturated cotton ball on the Surface of the laminate and cover the saturated cotton ball with a watch glass 10 cm Diameter . leave the covered reagent For 24 hours . after 24 hour wash the panel with Water , clean with detergent and rinse With de-ionized water . Leave the tested laminate For 24 hours and evaluate according to the level chart.⁽³⁾
- (2) **Method B :** Place 5 drops of the chemical reagent on the decorative surface of the tested laminate and Cover the chemical reagent with a watch glass 10 cm Diameter . leave the covered reagent For 24 hours . after 24 hour wash the panel with water , clean with detergent and rinse With de-ionized water . Leave the tested laminate For 24 hours and evaluate according to The level chart.⁽³⁾

(3) Level Chart :

Level No.	Description
0	No detectable stain , loss of gloss or change to the surface of the laminate
1	Slight stain or loss in gloss but no change to the surface of the laminate
2	Severe stain or slight change to the surface of the laminate
3	Swelling , Pitting , cracking or erosion to the surface of the laminate



AURA

Embossed-in-Register • Soft-Touch Finish • Anti-Fingerprint

AURA Product Description :

Aura is an acrylic surface with matt-gloss effects in register with the design. AURA is applicable for laminates presses to create embossed-in-register effects without extra cost or complexity usually required for melamine surfaces specially HPL and CPL. Aura is designed for to use as worktops , benches ...etc.

Aura is available to use in general conditions vertically and horizontally.

AURA has following properties :

- @ Anti Finger print – the surface characteristic enables the repellency of any moisture residue due to finger Touch and hens do not leave any finger print after touching / handling .
- @ High scratch and micro scratch resistance – the surface is resistance against scratches (caused by sharp Edges) and against micro scratch (caused by abrasive materials)
- @ Hygienic – suitable for use as kitchen worktop
- @ Chemical resistance – suitable for surface cleaning with all household cleaners / reagents and resistance Against most of the industrial chemicals (Hard acids / Hard bases / organic solvents / inorganic salts)
- @ HPL property – Aura acquire all the physical & mechanical propertied demand for thin HPL (HGS) and compact laminates (CGS) .

All the above listed advantages enable the Aura can be used in various areas such as : Kitchen , living Rooms , bathrooms , dining rooms , furniture , restaurant's , healthcare facilities and hospitals .



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AURA Cleaning and Maintenance Instructions (1) :

General :

As the surface of AURA acquire low light reflectivity , the use of any cleaning materials that contain abrasive substances and/or cleaning agents that contain low acidic value or high alkali value , might damage the surface permanently . Hence , the following cleaning instruction is recommended :

Cleaning Agents that should not be used :

The following cleaning agents should not be used : Abrasive scrubbing liquid , Abrasive scrubbing solid , Steal wool , Abrasive sponge , cleaning agents with low acidic value , cleaning agents with high alkali value

Cleaning Cloth / paper / sponge :

- Cleaning cloth should be free of dust that might scratch the surface
- Non abrasive Micro Fiber cloth use is highly recommended (Any non abrasive Micro Fiber cloth available in the market)
- Melamine Sponge
- Cleaning paper – any cleaning paper suitable for kitchen use

Cleaning Agents :

- Warm water : heated tap water up to 40°c
- Degreaser spray : Any Degreaser spray available in the market for kitchen surface cleaning
- Organic Solvent : Acetone / Methanol / Ethanol suitable for cleaning use
- UNIKA Super Matt Laminate Cleaner

Cleaning food stuff :

- Any food stuff such as Coffee , Tea , Milk , Red Wine , Balsamic vinegar , Oil , Soft Drinks , Coca Cola ,
- Fruit juice , wine , mustard , jam or ketchup must be cleaned from the surface of the laminate
- First remove the stain with a degreaser spray and a dry micro fiber cloth
- Second clean the residue with warm water and microfiber cloth
- In case the stain is not removed use UNIKA Super Matt Laminate cleaner according to producer instruction
- In case the stain is not removed see blow instructions for cleaning oily surface
- In case the stain is removed wipe any residue of moisture with a dry micro fiber cloth

Cleaning oily surface :

- Any substance that might cause oily surface such as vegetable oil , greasy cooked food , animal fat ,
- glues or Acaia gun must be cleaned from the surface of the laminate .
- Hot oil splashes that will not be removed immediately , will cause permanent damage to the surface
- Visual appearance and performance
- First remove the residue with cleaning paper .
- Second remove any stain left on the surface with a degreaser spray and a dry micro fiber cloth
- In case the stain is not removed use UNIKA Super Matt Laminate cleaner according to producer instruction
- In case the stain is not removed use organic solvent as suggested above .
- In case the stain is removed wipe any residue of moisture with a dry micro fiber cloth



AURA

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AURA Cleaning and Maintenance Instructions (2) :

Cleaning cosmetic product surface :

- Any cosmetic product such as Nail Varnish , Lipstick or facial powder must be cleaned from the surface of the laminate
- First remove the residue with a cleaning paper soaked with organic solvent
- Second remove any stain left on the surface with a degreaser spray and a dry micro fiber cloth
- Third clean the surface with warm water and microfiber cloth
- In case the stain is not removed use UNIKA Super Matt Laminate cleaner according to producer instruction
- Wipe any residue of moisture with a dry micro fiber cloth

Cleaning sticky surface :

- Any substance that might cause sticky surface as wax , solvent base glue , silicone base glue , adhesive tape , solvent base paint , nail polish , hair spray , oily facial past , Marker , Shoe polish , Pencil , graffiti spray or lacquers must be removed from the surface of the laminate
- First remove the residue with a cleaning paper soaked with organic solvent
- Second remove any stain left on the surface with a degreaser spray and a dry micro fiber cloth
- Third clean the surface with warm water and microfiber cloth
- In case the stain is not removed use UNIKA Super Matt Laminate cleaner according to producer instruction
- Wipe any residue of moisture with a dry micro fiber cloth