3D Films **RENOLIT** COVAREN PET
solid and printed

GENAERAL DESCRIPTION

RENOLIT COVAREN PET Films are single ore multilayerd PET Films which are 3-D thermo formable. Investment in technology and manufacturing has led to the production of superb designs and high quality solid colours, using the latest pigmentation, printing and embossing techniques. The products have excellent mechanical resistance, light fastness and stain resistance.

They are supplied as decorative surfacing for lamination to profile milled MDF boards and ensure processing (thermo-form presses) and application for interior equipment without problems. The films are primed on the reverse side.

PROCESSING

- Forms with a silicone membrane (other membranes have to be approved by the pressing company) or without a membrane.
- In general, well-known machine settings as used for 3D-PVC films can be used. A slight reduction of the temperatures for preheating and pressing of about 5°C is recommended.
- Adhesive: PUR-dispersion with hardener, the system should be adjusted according to glue supplier recommendations.

STORAGE CONDDITIONS

- Store in a dry clean environment at room temperature with moderate humidity. The material can be suspended in unopened packaging. Store away from sources of heat and sunlight.
- Material should be acclimatised 72 hours prior to use at room temperature (about 20°C).
- Shelf life: without PE protection film about 12 months, with PE protection film 3 months.

CLEANING RECOMMENDATIONS

- Use non abrasive cleaners or mild cleaning solutions.
- Do not use abrasive cleaners, solvents, polishes, waxes or steam cleaning tools.
- As a precaution to test the suitability of a cleaning product, apply to an inconspicuous area, minimizing the time of exposure and the amount of cleaning agent (diluting as recommended by the supplier) in order to prevent any damage to the surface.

TECHNICAL STATUS 2011

This technical information sheet represents our latest state of knowledge and shall inform without obligation. The herein stated details do not release the manufacture of our products from their own inspections and tests, which must correspond with the relevant national guidelines for its individual intended purpose. Especially it is the duty of the customer to control if the purchased product is suitable for its intended purpose.

TECHNICAL DATA

Properties / Test Methods	Values / Tolerances
1. Thickness (*) DIN EN ISO 2286-3, 1998-07	0,25 - 0,50 mm, tolerance +/- 7,5 %
2. Dimensional Stability 10 Min. 100°C, circulated air	longitudinal max. - 6 % transverse max. + 2 %
3. Embossing Stability 10 Min. 100°C, circulated air	no visible changes to gloss, embossing or colour compared to the standard
4. Light fastness DIN EN ISO 4892-2, 2006-06 DIN EN ISO 105 B 02, 2002-07	$\geq$ 6 (blue scale)
5. Chemical Resistance DIN EN 12720, 1997-10 (test substances and exposure times acc. DIN 68861/1, 2001-04)	Class 1 B
6. Scratch Resistance DIN 68861/4, 1981-12	Class 4 E (>0,5 – 1,0 N)
7. Resistance to Dry Heat DIN EN 12722, 1997-10	70°C , Classification 5
8. Resistance to Wet Heat DIN EN 12721, 1997-10	70°C , Classification 5
9. Abrasion Resistance DIN 68861/2, 1981-12	Class 2B (>350 – 650 rpm)
10. Gloss Level Tolerances DIN 67530, 60° measuring head, 1982-01	$\leq$ 15 +/-2 16 bis 30 +/- 3 31 bis 50 +/- 5 > 50 +/- 7
11. Colour Tolerance for plain films, for production, not valid for metallic DIN 53236 (45/0), 1983-01 DIN 6174, 2007-10 (only light colour)	$\Delta E \leq 0,50$ ΔL +/- 0,30 Δa +/- 0,20 Δb +/- 0,30
12. Colour Consistency of printed films and metallic designs: Original specimen comparison	Manufacture and visual assessment with original specimen.
13. Fault definition	Optical deviations are regarded as faults if they are recognisable with the naked eye from a distance of 50 cm, within 30 seconds in good lighting.

(*) the thickness refers to the smooth film surface and it may be up to 10 % more while using deep embosses –
then it will be during one whole order and from order to order in the shown tolerance.