

RESINO
INKS



DFC BARRIER COATINGS

CONTENT

- 1. Resino Inks**
- 2. PPWR & SUPD – Its impact on packaging**
- 3. Solution: Barrier Coatings**
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WHO ARE WE?

FACTS



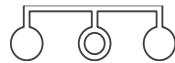
Located in Denmark



60 employees



Family run business



3 business units

SEE MORE ON : www.resino-inks.com



BARRIER COATINGS

PACKAGING & PACKAGING WASTE REGULATION

HOW IT AFFECTS PACKAGING MATERIALS

Reduction of Packaging Weight

Functionality is prioritized
Efficient use of material
Minimum size and weight is required

Waste Reduction

5% waste reduction until 2030
10% reduction until 2035
15% until 2040

Minimizing dangerous Chemistry

REACH and EU 1935/2004

Circular Economy – Recycling rates 2030

Plastics 55%
Paper & Board 85%
Wood 30%

BARRIER COATINGS

SINGLE USED PLASTIC DIRECTIVE

- Valid since July 2021
- No plastic use and labelling required-products
- Why not PLA?



WATER-BASED & COMPOSTABLE REVALUX® 164 VARNISH

BARRIER COATINGS

SOLUTION: BARRIER COATINGS

REPLACING PLASTICS

Advantages

- Plastic replacement
- SUPD & PPWR compliance
- Compostability
- Easier to recycle
- Tax savings

Requirements

- Safety and food compliance
- Barrier properties
- Mechanical stability
- Cost efficiency
- Circulable

Achievements

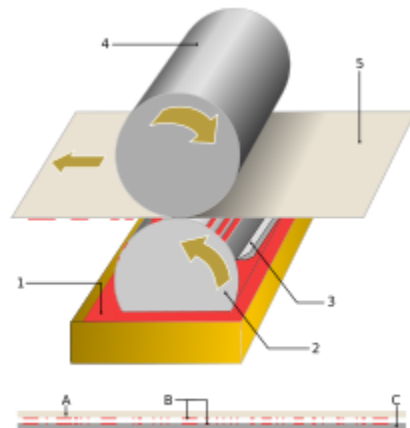
- Heatsealing properties
- Grease- and fat barriers
- Water barriers
- Moisture vapor barriers
- Oxygen barriers

BARRIER COATINGS

APPLICATION METHODS

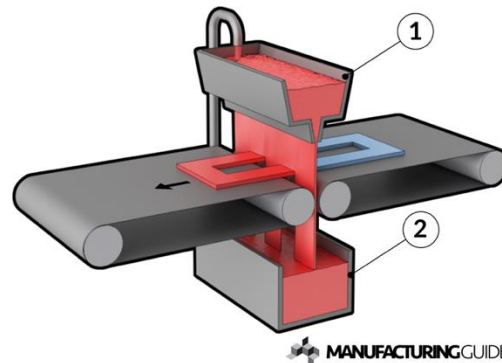
Printing

Flexo- and Gravure printing GTT aniloxes are being recommended to achieve a proper transfer



Curtain Coating

Paper passes a continuous liquid curtain
Web speed determines the applied volume

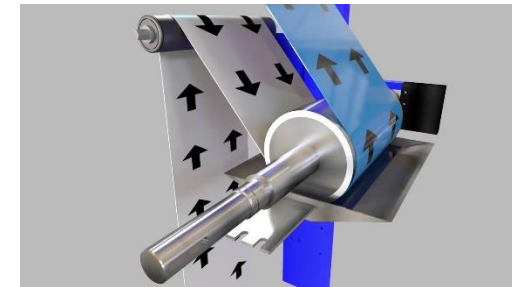


Dip coating

Material dipped into the liquid barrier coating

Spray coating

Being used for non-flat material, or thin layers



BARRIER COATINGS

SUPD BARRIER COATING

- Biodegradable /Compostable
- Flexo / GTT Aniloxes, sprayable
- 9g dried & 32 sec. / Viscosity
- KIT value 12
- COBB 120 sec. 33g
- Mainly being used for paper plates, pastry trays

REVALUX® 156-01 | WATER-BASED FOOD CONTACT PRINTING INK

REVALUX® 164 SUPD-COMPLIANT VARNISH 0115-05



CERTIFICATE FOR AWARDING AND USE OF THE 'OK COMPOST INDUSTRIAL' CONFORMITY MARK

TA8012307575

Issued by TÜV AUSTRIA GMBH

Product(s):

Domain
Group
Family
Type
Trade mark
Description / Particularities

Industrially Compostable Products
Components & Constituents
Ink, Colorant, Adhesive & Additives
Miscellaneous Constituent
Revalux 164 Varnish 0115-05
Overprint varnish
Colour: transparent
Maximum percentage of use: 1 % (% of dry weight of the finished product).
The disintegration properties need to be demonstrated when included in a finished product.

Licensee:

Resino Inks A/S
Metalbuen 13
2750 Ballerup
Denmark

Criteria:

• Certification Scheme with reference OK 01 edition F
Including EN 13432 (09-2000): « Packaging - Requirements for packaging recoverable through composting and biodegradation – Test scheme and evaluation criteria for the final acceptance of packaging »

Validity:

From 21 June 2023 till 21 June 2028

Conclusions of the examination:

The products comply with the above mentioned certification criteria, as confirmed by the report no 65004661-2023-AG-0587cert.

Applicable certification system:

Type examination followed by supervision through verification tests on samples from the distributor's stocks or of the market.
The conformity of the product is guaranteed by the procedures for awarding and use of the 'OK compost INDUSTRIAL' conformity mark. This only applies for specimen bearing the 'OK compost INDUSTRIAL' mark.

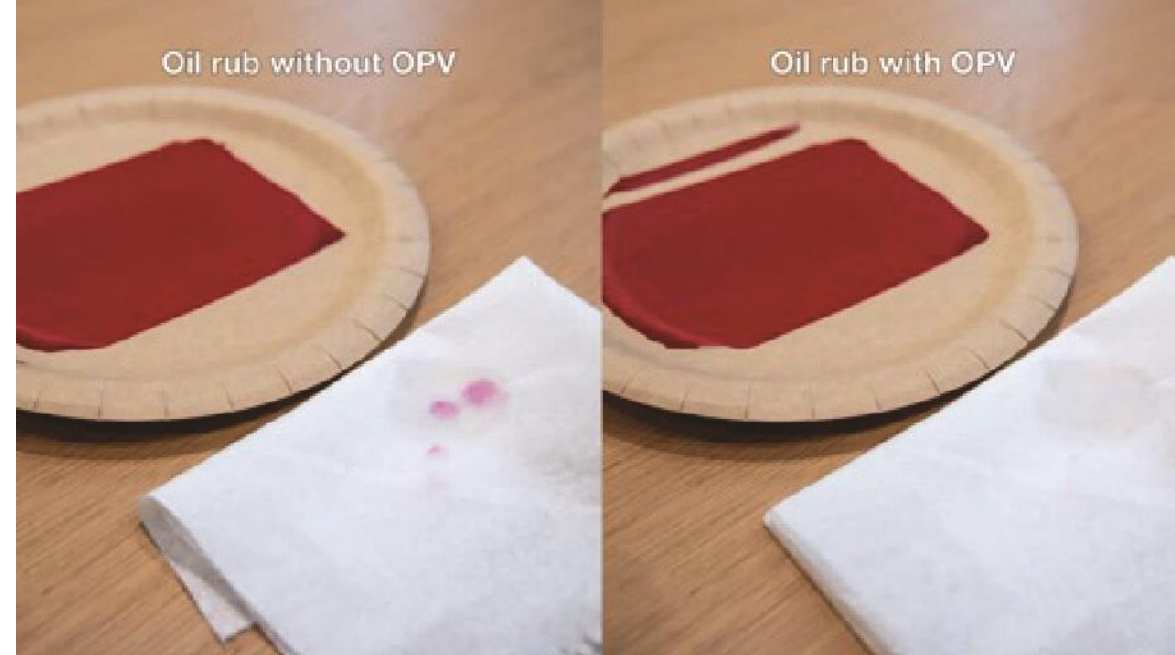
Rotseelaar, 21 June 2023

BARRIER COATINGS

GREASE & WATER BARRIER COATING

- 3g dried
- KIT 12
- COBB 120: 1g/m²
- Sealable within 0,3s at 5 bar and 160°C
- Resistant to water, coffee, milk, soda, acetic acid.
- Paper cups, Fast food boxes, anything that requires strong barrier properties

REVALUX® 156-02 SERIES | WATER BASED FLEXO INK



BARRIER COATINGS

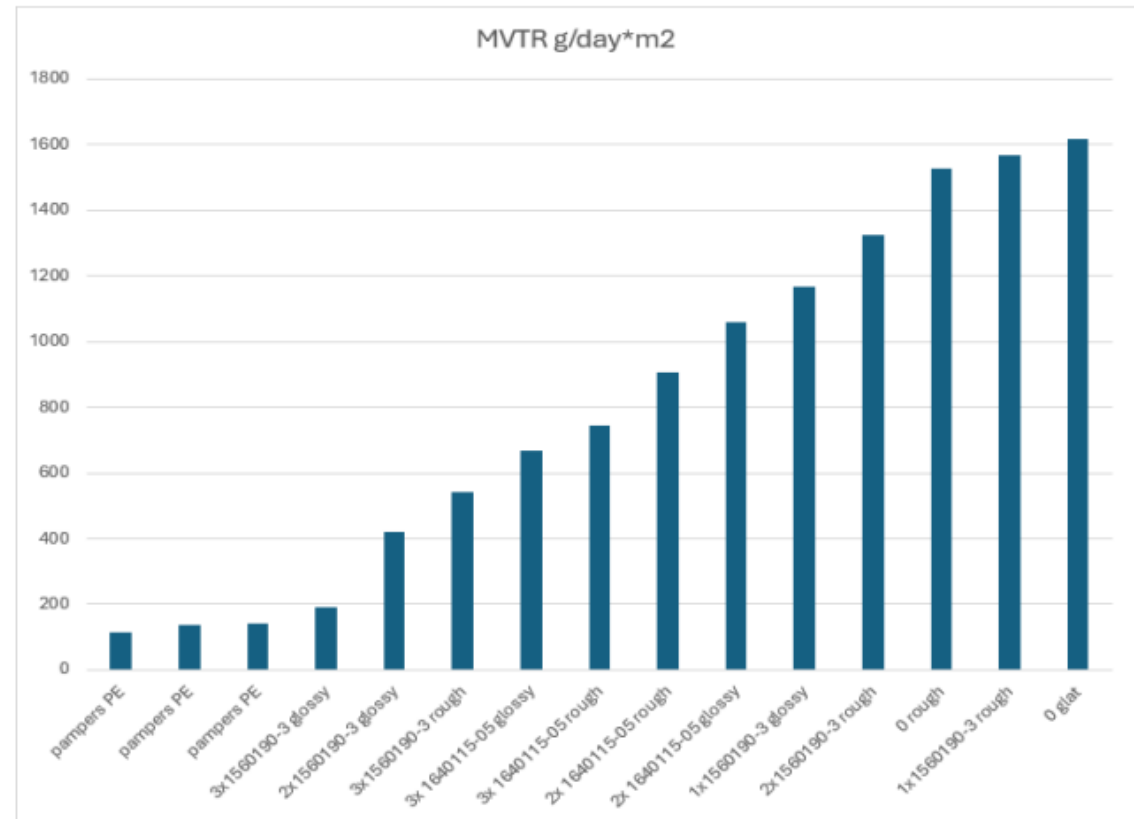
MOISTURE BARRIER COATING

- Developed for humidity sensitive products
- Functionality confirmed by MVTR-test
- 4g dried & 27 sec. Viscosity
- MVTR 6,21 (g/hour*m²)
- MVTR after 24 hours 149,11 (g/day*m²)
- Sugar, flour, other sensitive products

BARRIER COATINGS

MOISTURE BARRIER COATING

Sample	Description	Initial weight	Final weight	MVTR g/day*m2
1	pampers PE	247,17	246,68	112,1191152
2	pampers PE	256,06	255,47	135,0005672
3	pampers PE	262,36	261,75	139,5768577
4	3x1560190-3 glossy	261,59	260,72	190,7741067
5	2x1560190-3 glossy	265,08	263,16	421,0187182
6	3x1560190-3 rough	255,28	252,8	543,8158443
7	3x 1640115-05 glossy	268,35	265,43	668,1384006
8	3x 1640115-05 rough	250,03	246,78	743,6471924
9	2x 1640115-05 rough	259,38	255,41	908,3936473
10	2x 1640115-05 glossy	255,26	250,63	1059,411231
11	1x1560190-3 glossy	260	254,67	1168,765504
12	2x1560190-3 rough	250,48	244,44	1324,454718
13	0 rough	266,82	260,14	1528,480999
14	1x1560190-3 rough	246,72	239,56	1570,04897
15	0 glat	257,52	250,46	1615,430516



BARRIER COATINGS

UPCOMING DEVELOPMENT

MIGRATION BARRIER

- Heat resistant up to 180°C
- Rub resistant
- Avoiding set off migration of inks underneath
- Low COF
- Cardboards / inkjet

BARRIER COATINGS

CONTACT US FOR A FREE SAMPLE!

We have a dedicated technical support team ready to serve you anywhere at any time.



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RESINO INKS - HIGH-QUALITY PRINTING INKS FOR VARIOUS APPLICAT