



GLATFELTER

Glassine Echo[®]

Product Catalog



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ECHO[®] Glassine Papers

Glatfelter Ober-Schmittgen GmbH

ECHO[®] Glassine Papers

- 100% cellulose fiber from sustainable forestry resources
- Exclusively made of virgin fibers
- Transparent and grease-resistant (achieved by mechanical treatment)
- Offering highest density
- Available as FSC[®] C-041205 / PEFC[™] certified products

Advantages

- Taste and smell neutrality
- Permeable surface structure
- Recyclability

Features / Converting / Value Addition

- Paper substances from 25 g/m² up to 95 g/m²
- Two paper machines with a maximum trim of 1,500 mm and 1,700 mm
- Environmentally friendly bleached (ECF / TCF) / unbleached
- Opaque / colored
- Bobbins from 20 mm up to 1,700 mm
- Sheets from 100 x 100 mm up to 700 x 1,000 mm
- Plain or embossed with various patterns
- Wax surface treatment (Slip Easy)
- Printability: flexo, digital, offset and gravure printing

Certifications

- Glatfelter Ober-Schmittgen GmbH is certified according to ISO 9001, ISO 14001, ISO 22000 and ISO 50001.
- Kosher

Food contact certification (generally applicable for our ECHO[®] products)

- European regulation EU1935/2004
- Recommendation XXXVI of the German BfR
- American FDA regulations

For individual grades and specific applications please refer to our declarations of compliance.

Product-Overview

Quality Glassine	Substance g/m ²	Examples of application	Page
ECHO® Standard bleached glazed plain or embossed	from 25 - 95 g/m ² possible <u>Standard substances:</u> 30; 35; 40; 50; 60	packaging or wrapping of foodstuffs, photo albums, soap wrapping, chemise inlayer, envelopes for packing lists, Glassine envelopes, packaging of sweets	6
ECHO® bleached glazed baking paper	from 25 - 95 g/m ² possible <u>Standard substances:</u> 30; 35; 40; 50; 60	bakery applications max 220°	7
ECHO® Win bleached or colored glazed	from 30 - 60 g/m ² possible <u>Standard substances:</u> 30; 31; 32; 35	window envelopes, stamp albums, storage of films, medicine bags, sheet protectors, viewing window	8
ECHO® Bag bleached glazed	from 35 - 95 g/m ² possible <u>Standard substances:</u> 40; 45	paper bags	9
ECHO® Col coloured glazed plain or embossed	from 25 - 95 g/m ² possible <u>Standard substances:</u> 40	foodstuff packaging, art/craft material, packaging of sweets, paper wool, bags, paper tablecloth, cushion pads, 10 color selection	10
ECHO® Natur (Panettone) Unbleached, glazed plain or embossed	from 25 - 95 g/m ² possible <u>Standard substances:</u> 35; 40; 60	foodstuff packaging, baking cases, wrapping paper, paper bags, bakery applications max 220°	11
ECHO® Lam bleached glazed	from 25 - 95 g/m ² possible <u>Standard substances:</u> 30; 35; 40; 50; 60	lamination, packaging of foodstuffs or sweets, lids for food and non-food products	12
ECHO® Opak opaque glazed plain or embossed	from 25 - 95 g/m ² possible	packaging of foodstuffs or sweets e.g. cushion pads	13
ECHO® Slip Easy	Possible on all standard papers	cups for cold pralines, bakery stuff and candies	14
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ECHO[®] Standard

bleached glazed Glassine

100% bleached cellulose pulp	Standards	Tolerances
Substance	ISO 536	± 6 %
Thickness	ISO 534	± 6 %
Absolute residual moisture content	ISO 287	6,0 ... 8,0 %
PH-value	ISO 6588	6,0 ... 8,0

g/m ²	Thickness µm	Tensile strength MD ≥ N/15mm
		ISO 1924
25	20	27
30	24	32
35	28	36
40	32	38
50	40	45
60	48	50
70	56	65
80	64	70
90	72	82

ECHO®

bleached glazed baking paper Glassine

100% bleached cellulose pulp	Standards	Tolerances
Substance	ISO 536	± 6 %
Thickness	ISO 534	± 6 %
Absolute residual moisture content	ISO 287	6,0 ... 8,0 %
PH-value	ISO 6588	6,0 ... 8,0

g/m ²	Thickness µm	Tensile strength MD ≥ N/15mm
		ISO 1924
25	20	27
30	24	32
35	28	36
40	32	38
50	40	45
60	48	50
70	56	65
80	64	70
90	72	82

ECHO[®] Win

bleached glazed windowing Glassine

100% bleached cellulose pulp	Standards	Tolerances
Substance	ISO 536	± 6 %
Substance Afnor	ISO 536	± 4 %
Thickness	ISO 534	± 6 %
Absolute residual moisture content	ISO 287	6,0 ... 8,0 %
PH-value	ISO 6588	6,0 ... 8,0

g/m ²	Thickness µm	Transparency ≥ %	Tensile strength MD ≥ N/15mm
		DIN 53147	ISO 1924
30	23	85	32
31	24	85	34
32	24,5	84	34
32*	24,5	85	32
33	25	84	35
35	27	82	36
35*	27	85	32
37	28,5	81	38
40	31	79	40
50	38,5	74	47
60	46	68	55

*Complies with French regulation AFNOR NF 316

ECHO[®] Bag

bleached glazed Glassine* for Bags

100% bleached cellulose pulp	Standards	Tolerances
Substance	ISO 536	± 6 %
Thickness	ISO 534	± 6 %
Absolute residual moisture content	ISO 287	6,0 ... 8,0 %
PH-value	ISO 6588	6,0 ... 8,0

g/m ²	Thickness µm	Tensile strength MD ≥ N/15mm	Elongation MD %	Tear strength MD ≥ mN·m/m	Bursting strength ≥ kPa·m ² /g
		ISO 1924	ISO 1924	DIN 53115	DIN 53113
35	28	38	1,4	240	210
40	32	46	1,5	300	210
45	36	49	1,6	360	220
50	40	51	1,7	420	220

*We also produce opaque glazed Glassine ECHO[®] Bag on special request

ECHO® Col

colored glazed Glassine

100% bleached cellulose pulp	Standards	Tolerances
Substance	ISO 536	± 6 %
Thickness	ISO 534	± 6 %
Absolute residual moisture content	ISO 287	6,0 ... 8,0 %
PH-value	ISO 6588	4,0 ... 8,0

g/m ²	Thickness µm	Tensile strength MD ≥ N/15mm
		ISO 1924
40	32	38

<u>The following standard colours are available:</u>	
LIGHT YELLOW 11961	BLUE 1964
PURPLE 1965	BROWN 8008
ORANGE 1968	RED 11987
PINK 13966	BLACK BROWN 32430
LIGHT GREEN 1962	RED BROWN 1970
DARK GREEN 1963	BLACK BROWN 32500

- Other substances and special colors on special request
- Embossed with Linen, Silkworm and Spiderweb or plain
- 10 color selection on hand

ECHO[®] Natur

unbleached glazed Glassine

100% unbleached pulp or cellulose	Standards	Tolerances
Substance	ISO 536	± 6 %
Thickness	ISO 534	± 6 %
Absolute residual moisture content	ISO 287	6,0 ... 8,0 %
PH-value	ISO 6588	4,0 ... 8,0
Smoothness (Bekk) wire side	ISO 5627	≥ 1000 sec (typical value)
Smoothness (Bekk) upper side	ISO 5627	≥ 2000 sec (typical value)
Grease resistance	TAPPI	≥ 30 sec.

g/m ²	Thickness µm	Tensile strength MD ≥ N/15mm
		ISO 1924
35	28	36
40	32	40
45	36	44
60	48	60
95	76	81

Used for baking purposes in conventional as well as in microwave ovens up to a temperature of 220 °C

ECHO[®] Lam

bleached glazed Glassine for lamination

100% bleached cellulose pulp	Standards	Tolerances
Substance	ISO 536	± 6 %
Thickness	ISO 534	± 6 %
Absolute residual moisture content	ISO 287	6,0 ... 8,0 %
PH-value	ISO 6588	6,0 ... 8,0

g/m ²	Thickness µm	Smoothness (Bekk) wire side ≥ sec	Smoothness (Bekk) upper side ≥ sec	Tensile strength MD ≥ N/15mm
		ISO 5627	ISO 5627	ISO 1924
35	28	1.000	2.000	36
40	32	1.000	2.000	38

ECHO[®] Opak

opaque glazed Glassine

100% bleached cellulose pulp	Standards	Tolerances
Substance	ISO 536	± 6 %
Thickness	ISO 534	± 6 %
Absolute residual moisture content	ISO 287	6,0 ... 8,0 %
PH-value	ISO 6588	6,0 ... 8,0

g/m ²	Thickness µm	Opacity > %	Tensile strength MD ≥ N/15mm
		ISO 2471	ISO 1924
35	27	40	35
40	31	45	37
50	38	50	42
60	46	55	45

ECHO[®] Slip Easy*

glazed Glassine

100% bleached cellulose pulp	Standards	Tolerances
Substance	ISO 536	± 6 %
Thickness	ISO 534	± 6 %
Absolute residual moisture content	ISO 287	6,0 ... 8,0 %
PH-value	ISO 6588	4,0 ... 8,0
Glide angle	Internal method	≤ 20°

g/m ²	Thickness µm	Tensile strength MD ≥ N/15mm
		ISO 1924
30	24	32
35	28	36
40	32	38
50	40	43
60	48	50

*Surface treatment for better sliding property for all our paper grades.

Miscellaneous

Tolerances:

Roll widths	Tolerances
= 10 mm	+/- 0,2 mm
> 11 mm ... ≤ 20 mm	+/- 0,3 mm
> 20 mm ... ≤ 50 mm	+/- 0,4 mm
> 50 mm ... ≤ 100 mm	+/- 0,5 mm
> 100 mm ... ≤ 200 mm	+/- 1,0 mm
> 200 mm ... ≤ 400 mm	+/- 1,5 mm
> 400 mm ... ≤ 700 mm	+/- 2,0 mm
> 700 mm ... ≤ 1200 mm	+/- 2,5 mm
> 1200 mm	+/- 3,0 mm

For sheet products applies:
DIN EN 644

Transport, Handling and Storage Recommendation

- dry and hygienic storage (avoidance of strong odors)
- protection against humidity and moisture
- transport only in closed, hygienic and clean trucks or containers (no air condition)
- secure cargo from shifting
- temperature accommodation prior to converting essential to protect the Glassine from condensing humidity
- sheets - especially embossed - should not get piled

We can recommend a storage period of one year under the following conditions:

- storage in original packaging
- temperature: 18°C - 25°C
- indoor climate: 45% - 55% humidity
- protection from thermal fluctuation, direct sunlight and damage

Beyond one year storage we recommend to measure all relevant paper properties prior to processing.



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