

# BetterAircraftFabric™



**USA FAA STC'ed and  
Approved by Transport Canada!**

**The Revolutionary Aircraft Fabric that needs no paint**

**ORATEX-UL600**  
**ORATEX6000**

Paint free finishing and UV-proof Decal systems for your Airplane

**ORACOLOR® ORATRIM® ORALINE® EASYPLOT®**

certified by



and many more...

**BetterAircraftFabric™**

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Public Group  
<https://www.facebook.com/groups/1711231782441032/>



<https://www.youtube.com/user/BetterAircraftFabric>



# ORATEX-UL600 & 6000 - THE COVERING INNOVATION!

Incredible advantages over conventional covering products:

- Airworthy straight from the roll: It needs no paints, dope, coatings or sealants.
- Cost reduction about 50% as installed, compared to hired-out legacy systems.
- Resistant against UV and ageing, easy of testing for Continued Airworthiness.
- Up to 50% weight saving in comparison to conventional covering products.
- Extremely durable against mechanical impact and UV resistant.
- Fire resistant in accordance with DIN EN ISO 6941.
- Can be painted with **ORACOLOR®** if desired.
- Cuts aircraft covering time in half.
- Can also be heat vacuum-formed.
- Solvent free work environment.
- Can be re-shrunk repeatedly!
- Worldwide patented.
- Easy field-repairs.



✗ no dope ✗ no painting ✗ no sanding ✗ no time-wasting ✗ no harmful chemical exposure



## ORATEX-UL600 MK3 MTOW max. 600 Kg / 1323 lbs

Material: Polyester fabric (plain weave) with color UV-protection coating  
 Weight of the uncoated fabric: 55 - 65 g/m<sup>2</sup> (0.18 - 0.213 oz/sq.ft)  
 Weight of the coated fabric: 92 - 122 g/m<sup>2</sup> (0.301 - 0.4 oz/sq.ft) (dependent on color)  
 Tensile strength lengthwise: 750 - 1050 N / 50 mm  
 Tensile strength crosswise: 650 - 950 N / 50 mm  
 Breaking extension lengthwise: 10- 18 %  
 Breaking extension crosswise: 11 - 20 %  
 Tear propagation load lengthwise: 18 - 24 N  
 Tear propagation load crosswise: 16 - 22 N  
 Burst strength: 500 - 700 kPa (73 - 102 Psi)  
 Burst elevation: 14 - 18 mm (0.55 - 0.71 in)  
 Air permeability: Airtight (0.0 mm/s)  
 Shrinkage lengthwise (338 °F): 8 - 12 %  
 Shrinkage crosswise (338 °F): 8 - 12 %  
 Inflammability: not flammable  
 Melting Point: 482 °F

width	34 1/2 in	71 in
color	ref. no.	ref. no.
natural white	13-000-090	13-000-180
white	13-010-090	13-010-180
antique	13-012-090	13-012-180
olive drab	13-018-090	13-018-180
corsair blue	13-019-090	13-019-180
fokker red	13-020-090	13-020-180
cub yellow	13-030-090	13-030-180
sky blue	13-053-090	13-053-180
orange	13-060-090	13-060-180
black	13-071-090	13-071-180
silver	13-091-090	13-091-180

**NEW**

## ORATEX6000 MTOW max. 6000 Kg / 13228 lbs

Material: Polyester fabric (plain weave) with color UV-protection coating  
 Weight of the uncoated fabric: 95 - 105 g/m<sup>2</sup> (0.311 - 0.344 oz/sq.ft)  
 Weight of the coated fabric: 140 - 160 g/m<sup>2</sup> (0.459 - 0.524 oz/sq.ft) (dependent on color)  
 Tensile strength lengthwise: 1300 - 1600 N / 50 mm  
 Tensile strength crosswise: 1100 - 1400 N / 50 mm  
 Breaking extension lengthwise: 12 - 20 %  
 Breaking extension crosswise: 12 - 20 %  
 Tear propagation load lengthwise: 26 - 32 N  
 Tear propagation load crosswise: 28 - 34 N  
 Burst strength: > 1000 kPa (> 145 Psi)  
 Burst elevation: > 15 mm (>0.59 in)  
 Air permeability: Airtight (0.0 mm/s)  
 Shrinkage lengthwise: 9- 13 %  
 Shrinkage crosswise: 8 - 12 %  
 Inflammability: not flammable  
 Melting Point: 482 °F

width	34 1/2 in	71 in
color	ref. no.	ref. no.
white	14-010-090	14-010-180
olive drab	14-018-090	14-018-180
corsair blue	14-019-090	14-019-180
fokker red	14-020-090	14-020-180
cub yellow	14-030-090	14-030-180
sky blue	14-053-090	14-053-180
orange	14-060-090	14-060-180
black	14-071-090	14-071-180
silver	14-091-090	14-091-180

**NEW**

New **ORATEX®** fabric colors, orange (060) and black (071), are expected to be available in the second half of 2017.

## ORATEX® FELT BLADE

- invaluable for application and forming the material while the glue is activated with heat / for improved quality of workmanship
- ensures smooth fabric application eliminating creases and trapped air
- an essential tool for a perfect covering job

product	size / inch	ref. no.
Felt blade - small	3 x 4	0915
Felt blade - large	4 x 5 1/2	0948



NECESSARY ACCESSORY

## ORATEX6000 RIB-BRACING TAPE

Used in traditional aircraft construction to keep the ribs from distorting and twisting during the covering and under the flight loads over the lifespan of the airplane.

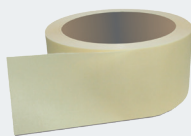


ORATEX® RIB-BRACING TAPE	
width: 1 in, length: 33 ft	
white	17-010-025-010
olive drab	17-018-025-010
corair blue	17-019-025-010
fokker red	17-020-025-010
cub yellow	17-030-025-010
sky blue	17-053-025-010
orange	17-060-025-010
black	17-071-025-010
silver	17-091-025-010

## ORATEX6000 REINFORCING TAPE

### ORATEX6000

Reinforcing tapes used when rib stitching.



NEW

fusible

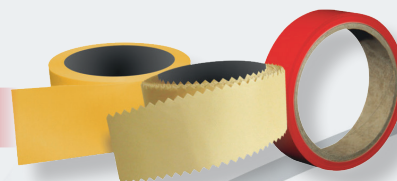
ORATEX® REINFORCING TAPE	
width: 1 in, length: 82 ft	
white	19-010-A
olive drab	19-018-A
corair blue	19-019-A
fokker red	19-020-A
cub yellow	19-030-A
sky blue	19-053-A
orange	19-060-A
black	19-071-A
silver	19-091-A

NEW

ORATEX® STRAIGHT EDGE TAPE, length: 82 ft						
width	1 in	1 3/8 in	2 in	3 in	4 in	5 in
natural white	16-000-A	16-000-B	16-000-C	16-000-D	16-000-E	16-000-F
white	16-010-A	16-010-B	16-010-C	16-010-D	16-010-E	16-010-F
antique	16-012-A	16-012-B	16-012-C	16-012-D	16-012-E	16-012-F
olive drab	16-018-A	16-018-B	16-018-C	16-018-D	16-018-E	16-018-F
corair blue	16-019-A	16-019-B	16-019-C	16-019-D	16-019-E	16-019-F
fokker red	16-020-A	16-020-B	16-020-C	16-020-D	16-020-E	16-020-F
cub yellow	16-030-A	16-030-B	16-030-C	16-030-D	16-030-E	16-030-F
sky blue	16-053-A	16-053-B	16-053-C	16-053-D	16-053-E	16-053-F
orange	16-060-A	16-060-B	16-060-C	16-060-D	16-060-E	16-060-F
black	16-071-A	16-071-B	16-071-C	16-071-D	16-071-E	16-071-F
silver	16-091-A	16-091-B	16-091-C	16-091-D	16-091-E	16-091-F

ORATEX® PINKED EDGE TAPE, length: 82 ft						
width	1 in	2 in	3 in	4 in	5 in	6 in
natural white	15-000-025	15-000-050	15-000-075	15-000-100	15-000-125	15-000-150
white	15-010-025	15-010-050	15-010-075	15-010-100	15-010-125	15-010-150
antique	15-012-025	15-012-050	15-012-075	15-012-100	15-012-125	15-012-150
olive drab	15-018-025	15-018-050	15-018-075	15-018-100	15-018-125	15-018-150
corair blue	15-019-025	15-019-050	15-019-075	15-019-100	15-019-125	15-019-150
fokker red	15-020-025	15-020-050	15-020-075	15-020-100	15-020-125	15-020-150
cub yellow	15-030-025	15-030-050	15-030-075	15-030-100	15-030-125	15-030-150
sky blue	15-053-025	15-053-050	15-053-075	15-053-100	15-053-125	15-053-150
orange	15-060-025	15-060-050	15-060-075	15-060-100	15-060-125	15-060-150
black	15-071-025	15-071-050	15-071-075	15-071-100	15-071-125	15-071-150
silver	15-091-025	15-091-050	15-091-075	15-091-100	15-091-125	15-091-150

NEW



fusible

## ORATEX-UL600 EDGE TAPE PINKED & STRAIGHT

For protecting structural joints, seams, covering rib-stitching, fasteners and doublers at exposed edges. Available in all of our **ORATEX®** colors, adhesive pre applied and ready to be ironed-on.

NEW

## ORATEX-UL600 SELF-ADHESIVE

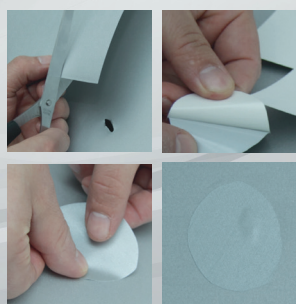
### REPAIR-SHEET A4:

A4 sheets to quickly repair small damages at your airplane covering.

Cut to size, - peel of backing paper, stick it on and rub it down: **DONE!**

### ORATEX®

### DISPERSION-HOTMELT-ADHESIVE



color	ref. no.
natural white	18-000-A4
white	18-010-A4
antique	18-012-A4
olive drab	18-018-A4
corsair blue	18-019-A4
fokker red	18-020-A4
cub yellow	18-030-A4
sky blue	18-053-A4
orange	18-060-A4
black	18-071-A4
silver	18-091-A4

NEW

The **ORATEX®** DISPERSION HOTMELT ADHESIVE is a revolutionary waterbased product with a worldwide patent. It has no unpleasant odours associated with conventional covering products. It is applied to both the airframe and to the areas of the fabric which are to be bonded to the airframe. For application always use our "Special Brush for **ORATEX®** Dispersion Hotmelt Adhesive" (ref. no.: 08424 / 08425 / 08426). When the adhesive has dried you can iron the covering onto the airframe.

At outside temperatures of less than 41 °F **ORATEX®** DISPERSION HOTMELT ADHESIVE can just be sent in special thermo boxes.

The current prices are available on request.

- waterbased adhesive
- easy to apply with our Special Brush
- no solvent smell or exposure to harmful chemicals whatsoever



quantity	ref. no.
1.7 oz	0974
3.4 oz	0975
0.52 qt	0976
1.06 qt	0977
1.32 gal	0978
2.64 gal	0979



# ORATEX® Application Instructions

Applying **ORATEX®** is simple and fun. It's just a matter of gluing it down and then shrinking it tight. What follows is a summary of the procedures involved. A more detailed manual will be shipped with your order, or is available on request. Also there is a monthly Tips&Tricks email for those who desire it.

## Preparing the Surface

All contact surfaces must be completely free of any grease, oil, dirt, wax, silicone or other contaminants. When working with glossy surfaces such as powder coating or gloss paint, the surface must be scuffed to provide tooth for the adhesive to adhere. Scotchbrite works well for scuffing most surfaces. Because **ORATEX®** is so durable, an unprotected wooden airframe could easily begin to deteriorate long before the fabric even begins to show wear. For that reason, all wooden surfaces should be painted or varnished (per aircraft designer's recommendation) and then scuffed or lightly sanded to insure adequate adhesion. Steel and Aluminum should be primed.

## Applying the Adhesive

Adhesive is applied to both the underside of the fabric and the contact area of the airframe. In other words, both surfaces are always coated with two layers of adhesive; No more - No Less.

Be certain to use adhesive that has not reached its expiration date and be sure to use enough adhesive. Do not skimp! After the glue has been applied, it must be allowed to dry completely. The glue will not adhere if you don't let it dry completely!  
- Its better to use multiple thin coats of glue than to have brush-strokes and runs and waves in the glue.  
A Thin coat of glue dries in 45 minutes.



## Cutting, Fitting and Securing the Fabric

Once the adhesive has dried completely (and thus turned from white to clear!), the fabric is secured to the airframe with non-abrasive clamps, such as spring clamps with rubber coated tips. Special tools are not required to cut the fabric. Good scissors or pinking shears or a sharp knife all work well. Leading edge seams overlap 4 inches, and trailing edge seams overlap 2 inches.

It is important to get the fabric as tight and as wrinkle free as possible when you glue it down. This is particularly important information for those of you who are experienced with other fabric systems, because **ORATEX®** does not shrink quite as much as some other fabrics. Just take the time to make the fabric as tight as possible on the glue down. It will make the shrinking job easier, and the end product will look great! Do not follow the advise of those that have experience with the old Legacy systems, their procedures do not work with **ORATEX®**!

## Activating the Adhesive

The adhesive is activated by heat, and pressure is required to ensure that the adhesive fully penetrates the weave of the fabric surface. The surface of the fabric is rubbed with a hot iron set at about 212° Fahrenheit (100° Celsius). This will melt and trigger the adhesive. As the adhesive reaches 158° Fahrenheit (70° Celsius) the melting will trigger the glue activation. As the glue melts, good pressure is applied with the iron to force the glue into good contact with the fabric. As the iron is moved forward to a new area, the melted glue behind will set in about 10 seconds. It is imperative that the fabric does not move while the glue is setting up. The Heating is done with either the Heatgun or the Hot Iron, both are supplied by us as well.

Once the adhesive has fully cured it will have a much higher melting point. It will still melt before the fabric melts (482°F) thus allowing for removal if necessary. But the melting point will be high enough to withstand any environmental exposures - for example, an airplane that is painted black and placed in the hottest desert on the hottest day.



## Shrinking the Fabric

Once the adhesive has had sufficient time to set (usually 24 hours, longer in a cold environment) it is time to shrink the fabric. Apply heat with your hot air gun (never more than 482°F / 250°C) and shrink the fabric until taut and wrinkle free. Before you begin shrinking, test your heat gun on a scrap piece of fabric. If you have the proper temperature, the fabric will not discolor or be damaged even with the nozzle close to the fabric.



Better to check this on a scrap than on a wing! If (when you glued the fabric down) you stretched and clamped the fabric to be as wrinkle free as possible, a minimal amount of shrinking will be required. This is easy with our tools as they have precise digital temperature controls! The finishing touch is the final application of heat, using your flat iron. This is only done after the heatgun use makes it look perfect, otherwise ugly optical distortions can occur. For this final shrinking, do not press down on the iron. Hold the iron „weightless“ and wave the iron back and forth over the unsupported surfaces. Light contact is all that is needed. Use a single Paper Towel under the Iron and dial in 160° Celsius. Once the shrinking is complete, your fabric will have a taut and smooth finished surface.



Compound curves are not a problem.

### Reinforcing and Finishing Tapes

All seams must be covered with finishing tape (pinked edge or straight edge may be used). Tapes come with a specialty glue already applied to their inside. In addition to the the glue that is already on the tape, glue must also be applied in a narrow fashion to the fabric seam itself, otherwise there is the possibility of air bubbles becoming trapped at the seam joint. To avoid this potential problem is simple. Just be sure to apply a line of glue that is about 1/4 inch wide and in three layers. Do not go overboard and apply glue wider than the Finishing tape! ... Remember, all you are doing is preventing tiny air bubbles from forming at the fabric joint, where the edge of the top layer of fabric is. The glue also makes the seam look good as it hides the edge of the top layer.

Be sure to apply reinforcing tapes to the wingribs, before rib-stitching/lacing or pop riveting is done (or whatever primary method of attachment the original aircraft design specifies). Finishing tapes are going to cover this up. If your design calls for rib stitching, the tapes will go over the stitching. If it calls for rivets, the tapes will go over the rivets. Just as you applied extra glue to the fabric seam, you also should apply extra glue to the rivets and rib stitching to prevent air bubbles under the tapes. After the rib tapes you apply the leading and trailing edge tapes. Leading edge tapes must be at least 4 inches wide, trailing edge tapes must be at least two inches wide. Tapes are available in one inch increments.



Rib Stitching on the Vertical Stabilizer of a Bearhawk LSA.

**Note:** Be sure to provide for drain and ventilation holes. Because **ORATEX®** is airtight, ventilation holes are necessary to allow for air expansion as the airplane gains altitude. Condensation must also be vented and drained! Be sure to use the **ORATEX®** Wax for future maintenance and ease of cleaning the airplane, there is a special cleaner-concentrate as well.

### Mistakes You Must Not Make:

- Do not bring fabric and airframe together until the adhesive has dried completely.
- Do not try to use a poor quality or non-digital heat gun or iron.
- Do not attempt to shrink the fabric until the glue has had at least 24 hours to set.
- Never allow the uncured adhesive to freeze (freezing will ruin the adhesive).
- Never rely on heat alone when gluing fabric; you must use both heat and pressure.
- Do not allow the fabric to move while the glue is setting up.
- Do not forget to provide for drain/ventilation holes.
- Do not apply fabric without allowing for specified minimum overlap (2“ trailing edge, 4“ leading edge)
- Never use the waxed rib-stitching/lacing thread of other manufacturers! Only use **ORATEX®**-Non-waxed-Thread !
- Do not follow concepts and instructions of other types of covering systems!

For price quote or to place an order, call weekdays 9am-5pm Alaska Standard Time (10am-6pm PST)

- Janina Teschner (Sales) (907) 227 1913 or Janina@BetterAircraftFabric.com

For tech support, call any day Noon-6pm Alaska Standard Time (1pm-7pm PST)

- Lars Gleitsmann (Owner) (907) 229-6792 or Lars@betteraircraftfabric.com

# All products from one provider - for a perfect finish!

Our covering products **EASYPLOT**<sup>®</sup>, **ORALINE**<sup>®</sup> and **ORATRIM**<sup>®</sup> are AVIATION CERTIFIED:

- free of PVC
- high gloss
- UV-proof
- highly dimensionally stable and still very light
- very durable, abrasion-proof
- extraordinary temperature resistant
- color-matched to our other products
- totally fuel proof
- self-adhesive
- can be painted
- very durable

## EASYPLOT<sup>®</sup>

### CUTTING FILM

The cutting film made of UV-proof polyester for **highest standards!**

width: 20 cm / 7 7/8 inch, 30 cm / 11 13/16 inch, 38 cm / 14 61/64 inch, 60 cm / 23 5/8 inch



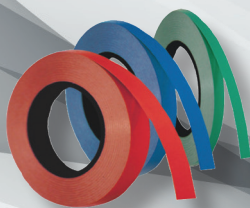
**EASYPLOT**<sup>®</sup> cutting films are the environmentally friendly alternative compared to PVC-products.  
In use on Supersonic Military Aircraft of the Russian Federation.



## ORALINE<sup>®</sup>

### TRIM STRIPES

10 m (32ft 9.7 inch) roll in one millimeter to 20 mm (25/32 of an inch) width

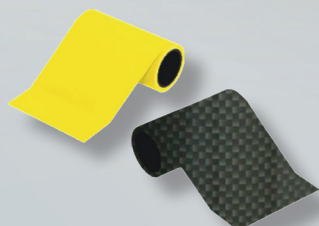


For **markings and fine details.**  
Give your aircraft a customized look!

## ORATRIM<sup>®</sup>

### TRIM STRIPES

2 m (6ft 6.7 inches), 5 m (16ft 4.8 inches) or 25 m (82ft 1/4 inch)  
rolls available as 9.5cm (3 47/64 inch) or 12cm (4 23/32nd inch) wide



For **creative designs** without extensive painting!





EASYPLOT® UVK film color	width: 7.78 in	width: 11.81 in	width: 14.96 in	width: 23.62 in
	for SV-8	for SV-12	for SV-15	for GS-24
	ref. no.	ref. no.	ref. no.	ref. no.

standard colors				
white	152-010	153-010	154-010	150-010
grey	152-011	153-011	154-011	150-011
cream	152-012	153-012	154-012	150-012
turquoise	152-017	153-017	154-017	150-017
olive drab	152-018	153-018	154-018	150-018
corsair blue	152-019	153-019	154-019	150-019
red	152-020	153-020	154-020	150-020
bright red	152-022	153-022	154-022	150-022
ferri red	152-023	153-023	154-023	150-023
pink	152-024	153-024	154-024	150-024
cub yellow	152-030	153-030	154-030	150-030
golden yellow	152-032	153-032	154-032	150-032
cadmium yellow	152-033	153-033	154-033	150-033
green	152-040	153-040	154-040	150-040
light green	152-042	153-042	154-042	150-042
may green	152-043	153-043	154-043	150-043
blue	152-050	153-050	154-050	150-050
dark blue	152-052	153-052	154-052	150-052
sky blue	152-053	153-053	154-053	150-053
violet	152-054	153-054	154-054	150-054
purple	152-055	153-055	154-055	150-055
orange	152-060	153-060	154-060	150-060
black	152-071	153-071	154-071	150-071
design-black	152-072	153-072	154-072	150-072
brown	152-081	153-081	154-081	150-081
silver	152-091	153-091	154-091	150-091
gold	152-092	153-092	154-092	150-092
bordeaux red	152-120	153-120	154-120	150-120
transparent	182-000	183-000	184-000	180-000

EASYPLOT® UVK film color	width: 7.78 in	width: 11.81 in	width: 14.96 in	width: 23.62 in
	for SV-8	for SV-12	for SV-15	for GS-24
	ref. no.	ref. no.	ref. no.	ref. no.

pearl colors				
pearl white	152-016	153-016	154-016	150-016
pearl red	152-027	153-027	154-027	150-027
pearl yellow	152-036	153-036	154-036	150-036
pearl golden yellow	152-037	153-037	154-037	150-037
pearl green	152-047	153-047	154-047	150-047
pearl purple	152-056	153-056	154-056	150-056
pearl blue	152-057	153-057	154-057	150-057
pearl charcoal	152-077	153-077	154-077	150-077
fluorescent colors				
fluor. magenta	152-013	153-013	154-013	150-013
fluor. neon-pink	152-014	153-014	154-014	150-014
fluor. Violet	152-015	153-015	154-015	150-015
fluor. Red	152-021	153-021	154-021	150-021
fluor. pink	152-025	153-025	154-025	150-025
fluor. power pink	152-028	153-028	154-028	150-028
fluor. Yellow	152-031	153-031	154-031	150-031
fluor. Green	152-041	153-041	154-041	150-041
fluor. blue	152-051	153-051	154-051	150-051
fluor. orange	152-064	153-064	154-064	150-064
fluor. signal orange	152-065	153-065	154-065	150-065
scale colors - 100% opaque				
scale white	162-010	163-010	164-010	160-010
scale red	162-020	163-020	164-020	160-020
scale bright red	162-022	163-022	164-022	160-022
scale ferri red	162-023	163-023	164-023	160-023
scale cub yellow	162-030	163-030	164-030	160-030
scale golden yellow	162-032	163-032	164-032	160-032
scale yellow	162-033	163-033	164-033	160-033

EASYPLOT® FUN 4 UVK film		0.49 in squares width: 7.87 in	0.49 in squares width: 11.81 in	0.49 in squares width: 14.96 in
background color	color of design	for SV-8 ref. no.	for SV-12 ref. no.	for SV-15 ref. no.
yellow	red	197-033-023	198-033-023	199-033-023
white	red	197-010-023	198-010-023	199-010-023
white	dark blue	197-010-052	198-010-052	199-010-052
white	black	197-010-071	198-010-071	199-010-071
turquoise	black	197-017-071	198-017-071	199-017-071
red	black	197-023-071	198-023-071	199-023-071
yellow	black	197-033-071	198-033-071	199-033-071
silver	black	197-091-071	198-091-071	199-091-071
pearl white	black	197-016-071	198-016-071	199-016-071
pearl red	black	197-027-071	198-027-071	199-027-071
pearl yellow	black	197-036-071	198-036-071	199-036-071
pearl golden yellow	black	197-037-071	198-037-071	199-037-071
pearl green	black	197-047-071	198-047-071	199-047-071
pearl purple	black	197-056-071	198-056-071	199-056-071
pearl blue	black	197-057-071	198-057-071	199-057-071
pearl charcoal	black	197-077-071	198-077-071	199-077-071

EASYPLOT® FUN 5 + 3 + 6 UVK film		FUN 5 1.02 in squares width: 23.62	FUN 5 2.05 in squares width: 23.62	FUN 6 4.09 in squares width: 23.62
background color	color of design	for GS-24 ref. no.	for GS-24 ref. no.	for GS-24 ref. no.
white	red	187-010-023	188-010-023	189-010-023
yellow	red	187-033-023	188-033-023	189-033-023
white	dark blue	187-010-052	188-010-052	189-010-052
white	black	187-010-071	188-010-071	189-010-071
red	black	187-023-071	188-023-071	189-023-071
yellow	black	187-033-071	188-033-071	189-033-071
silver	black	187-091-071	188-091-071	189-091-071
pearl white	black	187-016-071		
pearl red	black	187-027-071		
pearl yellow	black	187-036-071		
pearl golden yellow	black	187-037-071		
pearl green	black	187-047-071		
pearl purple	black	187-056-071		
pearl blue	black	187-057-071		
pearl charcoal	black	187-077-071		

### ORATRIM® TRIM STRIPES

ORATRIM® is available in all EASYPLOT®-colors and in 3 different lengths (6.5 ft, 16.4 ft, 82 ft) as well as in 2 different widths (3.74 in, 4.72 in): e.g. 27-classification, color (e.g. 023 for ferri red), length (e.g. 002 for 2 m), GA (General Aviation): 27-023-002-GA

### ORALINE® TRIM STRIPES, 10 m - roll

ORALINE® is also available in all EASYPLOT®-colors from 0.04 in, 1/25 in to 0.79 in, in steps of 0.04 in, special sizes are available on request: e.g. 26-classification, color (e.g. 053 for sky blue), width (e.g. 012 for 12 mm) GA (General Aviation): 26-053-012-GA

# ORACOLOR® multi-component paint for your Cowling, Gearlegs and other Airframe parts

- highly concentrated
- extremely durable against mechanical impact and UV
- fuel-proof
- identical in color - combinable with **EASYPLOT®**, **ORATRIM®**, **ORALINE®**, **ORATEX®-UL600** and **ORATEX® 6000**

**ORACOLOR® MULTI-COMPONENT-ELASTIC PAINT** for painting fabric covering, wood and metal  
- permanently flexible WITHOUT the use of plasticizers!



The **ORACOLOR® MULTI-COMPONENT-ELASTIC PAINT** for General Aviation was developed for painting fabric coverings, wood and metal. The paint is permanently flexible, WITHOUT the need of plasticizers, due to its special formulation. Cracks which occur with conventional paints, especially on fabrics, do not happen with **ORACOLOR® MULTI-COMPONENT-ELASTIC PAINT**. Depending on the choice of hardener the paint can be brushed or sprayed.

## ORACOLOR® SPECIAL THINNER



This special thinner is used to adjust the viscosity of **ORACOLOR®** paint. You can add up to 40 % thinner to the paint, depending on the spray gun / air brush system used. Especially in colder or warmer temperatures it is necessary for an optimal coverage of the paint to be adjusted in viscosity. It can be also used to clean brushes, air guns and tools. If a partially used can of **ORACOLOR®** paint has thickened after a long storage time, you can readjust to viscosity by adding **ORACOLOR® SPECIAL THINNER** to your paint.

## ORACOLOR® HARDENER FOR SPRAYING



For the application of **ORACOLOR®** 2-component paint with a spray gun / airbrush, **ORACOLOR® HARDENER FOR SPRAYING** is added to the paint. Mixing ratio (paint: hardener): 2:1.

## ORACOLOR® HARDENER FOR BRUSHING



For the application of **ORACOLOR®** as a 2-component paint with a brush, **ORACOLOR® HARDENER FOR BRUSHING** is added to the paint. Mixing ratio (paint: hardener): 2:1.

## ORACOLOR® FILLER



A flexible, single component product for the preparation of the surface - especially wood - to achieve a good finish.

## ORACOLOR® WASH-PRIMER



**ORACOLOR® Wash Primer** is used to treat bare metal airframe components which would otherwise corrode or rust without a protective coating. This applies to both, steel and aluminium. When dealing with tubular structures with open-ends pay attention to the fact that the inside also needs to be protected as otherwise the moisture which condenses in the tube will lead to irreversible corrosion damage. The Washprimer can also be used as adhesive agent for painting metal surfaces with **ORACOLOR®** paint.

## ORACOLOR® FLAT-FINISHING AGENT



In order to get a satin or not-shiny surface, simply add our **FLAT-FINISHING AGENT** to the **ORACOLOR®** paint system. The level of flattening can be adjusted by the dose added. PLEASE NOTE: The flat-finishing agent slightly changes the color of the paint. The addition of a flat-finishing agent requires a hardener in a 2:1 ratio. Depending on the spraying device, thinner up to 40 % can be added.

ADVISED ACCESSORY



# ORACOLOR® MULTI-COMPONENT-ELASTIC PAINT for painting fabric coverings, wood and metal

ORATEX6000 colors	
white	1113-010B
olive drab	1113-018B
corsair blue	1113-019B
fokker red	1113-020B
cub yellow	1113-030B
sky blue	1113-053B
orange	1113-060B
black	1113-071B
silver	1113-091B

ORATEX-UL600 colors	
white	1110-010B
antique - opaque	1110-012BD
antique - colored transp.	1110-012BL
olive drab	1110-018B
corsair blue	1110-019B
fokker red	1110-020B
cub yellow	1110-030B
sky blue	1110-053B
orange	1110-060B
black	1110-071B
silver	1110-091B

ORACOLOR® color	1.06 quart ref. no.
transparent	1121-000B
white	1121-010B
grey	1121-011B
cream	1121-012B
turquoise	1121-017B
olive drab	1121-018B
corsair blue	1121-019B
red	1121-020B
bright red	1121-022B
ferri red	1121-023B
pink	1121-024B
cub yellow	1121-030B
golden yellow	1121-032B
cadmium yellow	1121-033B
green	1121-040B
bright green	1121-042B
may green	1121-043B
blue	1121-050B
dark blue	1121-052B
sky blue	1121-053B
violet	1121-054B
purple	1121-055B
pearl blue	1121-057B
orange	1121-060B
black	1121-071B
brown	1121-081B
silver	1121-091B
bordeaux red	1121-120B

ORACOLOR® color	1.69 quart ref. no.
<b>Fluorescent</b>	
magenta fluoresz.	1121-013B
neon-pink fluoresz.	1121-014B
violet fluoresz.	1121-015B
red fluoresz.	1121-021B
pink fluoresz.	1121-025B
power pink	1121-028B
yellow fluoresz.	1121-031B
green fluoresz.	1121-041B
blue fluoresz.	1121-051B
orange fluoresz.	1121-064B
signal orange fluoresz.	1121-065B
UV-protection paint - 1.6 qt	1121-001B

ORACOLOR® color	1.06 quart ref. no.
<b>Scale - 100 % opaque</b>	
scale white	1122-010B
scale red	1122-020B
scale bright red	1122-022B
scale ferri red	1122-023B
scale cub yellow	1122-030B
scale golden yellow	1122-032B
scale yellow	1122-033B

Also available in 8.7 oz bottling!

<b>ORACOLOR® SPECIAL THINNER</b>	8.7 oz	100-996	<b>ORACOLOR® WASH-PRIMER</b>	3.4 oz
	1.06 quart	1100-996		0.53 quart
<b>ORACOLOR® HARDENER FOR SPRAYING</b>	1.7 oz	100-997	<b>SPECIAL REMOVER FOR ORATEX® DISPERSION HOTMELT ADHESIVE</b>	1.06 quart
	0.53 quart	1100-997		8.7 oz
<b>ORACOLOR® HARDENER FOR BRUSHING</b>	1.7 oz	100-998	<b>ORATEX® CLEANER</b>	0.53 quart
	0.53 quart	1100-998		1.06 quart
<b>ORACOLOR® FLAT-FINISHING AGENT</b>	1.7 oz	100-995		0.53 quart
	0.53 quart	1100-995		1.06 quart
<b>ORACOLOR® FILLER</b>	3.4 oz	100-999		
	1.06 quart	1100-999		



## NECESSARY TOOLS & ACCESSORIES



### STEINEL HEAT GUN HG 2320 E

with case and much equipment (ref. no.: 08465) / without case and equipment (ref. no.: 08480)

Perfect handling and real fun: 2300-watt brushless motor, rated for 1.000 hours of operation. Digital temperature adjustment by joystick. LCD display showing temperature in 10 °C steps, includes heat build-up warning function and residual-heat indicator. The optimized weight balance and ergonomically shaped handle with soft inlay permit fatiguefree work. Non-slip standing surface and hanger. To ensure a reliable work process, the LOC function can be used to lock all settings on the tool. It is supplied in a case complete with 50 mm surface nozzle, reflector nozzle, 9 mm reduction nozzle and shrink tubings.



### STEINEL HEAT GUN HL 2020 E

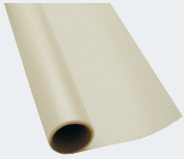
with case incl. reduction nozzle (ref. no.: 08470)

For passionate DIY-men. At expert level. The HL 2020 E heat gun is extremely robust, promising to last a good 20% longer than its predecessor. Hot air adjustable in 3 steps (150/ 150 -300/ 300 - 500 l/min). Professional extras: the residual heat indicator warns the user that the delivery nozzle is still hot and can cause burns even long after the tool has been unplugged. And the joystick permits intuitive operation and use. The current working temperature and airflow rate is indicated on the LCD display which is easy to read at any light level. The tool immediately responds to heat build-up by indicating a warning triangle on the display.



### ORATEX® PROTECTION WAX, 450 ml (0.48 quart) (ref. no.: 08240)

To protect against contamination and used for an easier cleaning as well as for maximum color protection. Shake well before use. Using our APPLICATION PADS (ref. no.: 08452) or with a cotton cloth, the wax has to be incorporated thoroughly into the fabric followed by a polishing with a micro fibre cloth.



### SILICONISED RELEASE PAPER, 2 m (6ft 6.7 inch) (ref. no.: 12-100-002), 5 m (16ft 4.8 inch) (ref. no.: 12-100-005)

To prevent the fabric from receiving iron marks while covering, the SILICONISED RELEASE PAPER is to be placed with the glossy side to the fabric while ironing. The iron should only slide on the dull side of the SILICONISED RELEASE PAPER and NEVER directly on the fabric as there will be the danger of the iron shoe to create marks on the fabric.



### SPECIAL REMOVER FOR ORATEX® DISPERSION HOTMELT ADHESIVE 250 ml (0.26 quart) (ref. no.: 0957), 500 ml (0.53 quart) (ref. no.: 0958), 1000 ml (1.06 quart) (ref. no.: 0959)

The ORATEX® Adhesive Remover serves to remove fresh ORATEX® Dispersion Hotmelt Adhesive remainders. You soak an uncolored (white) piece of natural fibre cloth (e.g. cotton) with the adhesive remover. With this wet piece of cloth, you slightly wipe two to three times over the surface to remove the remainders of the adhesive.



### PRESS ROLL (ref. no.: 08150)

The press roll is used to perform work under thermal loads. It is used especially when ironing-on and pressing the covering on difficult areas such as tips. The press roll can be used with high pressure without marking.



### ORATEX® T14 IRON (ref. no.: 08420)

- variable adjustable temperature control from 90 °C to 160 °C with digital display
- built-in microprocessor controls temperature fluctuations
- strong die-cast aluminum plate for optimal heat storage
- voltage: 230 V-power: 1200 W-weight: approx. 0.9 kg



### PINKING SHEARS (ref. no.: 0906)

The pinking shears are used to make easily DIY pinked edge tapes and for „good-looking“ cutting edges.



### ORACOLOR® PAINT BRUSH

40 mm (1 37/64 inch) / 60 mm (2 23/64 inch) / 80 mm (3 5/32nd inch) (ref. no.: 08152 / 08153 / 08154)

This special paint brush gives you the opportunity to achieve an excellent paint job. The paint layer you will get is homogeneous and without brush marks. For a professional finishing result you will not have to be an expert. Due to the hardener in the ORACOLOR® system the brush should be used only once.



### SPECIAL BRUSH FOR ORATEX® DISPERSION HOTMELT ADHESIVE

80 mm (3 5/32nd inch) / 38 mm (1 1/2inch) / 25 mm (63/64 of an inch) (ref. no.: 08424 / 08425 / 08426)

In order to apply the ORATEX® dispersion hotmelt adhesive and ORACOVER® foam adhesive properly, you have to use this special brush. If you want to use the brush again, you need to put it in cold water IMMEDIATELY after using and clean it properly, otherwise it will be useless as the brush hairs will stick together.

## ADVISED TOOLS & ACCESSORIES

NEW



### ORATEX® PRIMER (granules), bonding agent for ORATEX® straight / pinked edge tapes

1 g (0.04oz) (ref. no.: 08565), 2,5 g (0.09 oz) (ref. no.: 08566), 5 g (0.18 oz) (ref. no.: 08567), 10 g (0.35 oz) (ref. no.: 08568)

Our advice for extreme weather conditions, for an optimal adhesion of ORATEX®-straight / pinked edge tapes. Mix the granules with Acetone (solvent) of the brand Rodda™ (Part Number 79 9273 1).



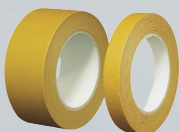
### WAX FREE RIB STITCHING THREAD / RIB LACING CORD FOR ORATEX® (ref. no.: 08140)

Most traditional Fabric Covered Aircraft require the fabric to be stitched to the ribs, often as a primary means of attachment but also important to spread out flightloads evenly in Warren Truss Structures, to prevent failure of cap strips. All Aircraft with Original Piper and Taylorcraft Wing Ribs should be rib stitched. To stitch a Super Cub three rolls would be needed.



### PROTECTIVE CLOTH FOR IRONING, 10 items (ref. no.: 08460)

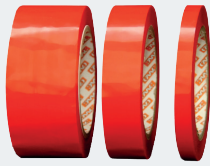
The iron is placed in the centre of the protective cloth, all 4 sides are being folded up towards the handle and fixed by means of a self-adhesive tape. It protects the ironed surfaces and avoids scratches and marks caused by the iron.



### FIXING TAPE FOR ORATEX®, length: 50 m (164ft 6 inches) width: 19 mm (3/4inch) (ref. no.: 08258), width: 50 mm (1 31/32nd inch) (ref. no.: 08259)

The Fixing Tape is used whenever ORATEX® needs to be fixed and is easily removable.





**ORATEX® MASKING TAPE**, length: 66 m (216ft 6 1/2inch), width: 10 mm (25/64 of an inch) (ref. no.: 08230-010), width: 30 mm (1 3/16 inch) (ref. no.: 08230-030), width: 50 mm (1 31/32nd inch) (ref. no.: 08230-050)

The well-known problem: when painting fabric, especially when using a brush or a paint roller, the paint runs into the depressions beneath the masking. After removing the masking tape one is annoyed at the uneven edges. But not with the masking tape for **ORATEX®** "The Red One". Stick on, press on, paint or roll or spray. Just let the paint dry and crosslink after the application of the last layer of paint. After removing the masking tape a light adhesive film will remain. However, this adhesive film is harmless and can be removed with the **ORATEX®** CLEANER after the paint is completely dry.



**ORACOLOR® 2-COMPONENT-POLYURETHANE-FILLER**, 300 g (10.59 oz) (ref. no.: 08445), color: white

The 2-Component-Polyurethane-Filler comes with great filling properties, dries fast, DOES NOT SHRINK, is temperature-resistant, dries fast and can be sanded easily. It has been developed to be the base for the **ORACOLOR®** paint system. The 2-Component-Polyurethane-Filler is supplied with the correct hardener. Unlike basic fillers areas filled with **ORACOLOR®** 2-Component-Polyurethane-Filler can be immediately covered with **ORATEX®**.



**STEINEL TEMPERATURE SCANNER HL Scan** (ref. no.: 08475)

Total temperature control and never again melting holes in the covering. HL Scan measures the temperature at the workpiece surface while working on it with the hot air tool. An acoustic signal sounds as soon as the heat either exceeds or falls below the ideal temperature. The display also shows whether the workpiece surface is too hot or too cold. Red means „too hot“, green is "ideal temperature" and blue means "too cold". The warning tolerance range can be selected to suit individual needs. If chosen, the visual and acoustic warning can be deactivated.



**ORATEX® CLEANER CONCENTRATE**, 1000 ml (1.06 quart) (ref. no.: 08210)

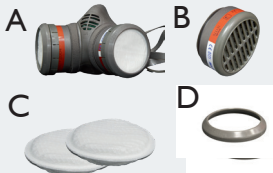
**ORATEX® CLEANER READY FOR USE**, 500 ml (0.53 quart) (ref. no.: 08200)

The cleaning agent of professionals for covered aircraft. The **ORATEX®** CLEANER removes grease, oil, wax, soot and resin easily. The concentrate needs to be diluted to 1:3 or 1:10 depending on the soiling. The **ORATEX®** CLEANER is used to clean dirty surfaces like plastic and textile surfaces. Spray the CLEANER from 20 cm distance. Allow it to work for ca. 1 minute. Use an absorbent cloth crosswise to soak up the dissolved dirt and rinse with clear water afterwards. Do not let dry. Afterwards, use clear water for washing down. Very good biodegradable. Notice: Do not use in direct solar irradiation or on hot surfaces. Only use on water- and alkali-resistant surfaces.



**RESPIRATOR MASK WITH FILTER AND BOX** (ref. no.: 08249)

Applying organic solvents a respirator which is equipped with filters against organic solvent is part of your personal protection equipment. Organic solvents can be found in **ORATEX®** DEGREASER, **ORATEX®** ADHESIVE REMOVER, **ORACOLOR®** paint, hardeners, thinners and fillers, base coats, wash-primers etc. Think of your personal safety and only work in well ventilated rooms. According to national safety regulations the use of a respirator mask is obligatory, protects your health and assures your safety when you handle the above mentioned chemicals.



Box content:

- A) 1 x mask size M
- B) 2 x filter for solventA2 (available as a replacement part, ref. no.: 08251)
- C) 2 x dust particle filter P2 D (available as a replacement part, ref. no.: 08250)
- D) 2 x dust particle filter adapter (available as a replacement part, ref. no.: 08252)



**WORKING GLOVES**, size 8 / 9 / 10 (ref. no.: 08428 / 08429 / 08430)

Working gloves assist you to hold the covering while stretching. Thanks to the knobs on the inside of the palm the covering can be held and stretched easily over the area to be covered, to have an easy ironing job. We recommend the use of the working gloves for an optimal handling of the covering. Additionally, they protect your hands from heat, especially when covering the tips with a heat gun.



**CHEMICAL GLOVES**, size 7,5 M / size 9,5 XL (ref. no.: 08431 / 08432)

Chemical gloves are part of the personal protection equipment and they serve your safety and health. The application of the gloves is obligatory as soon as you have to work with organic solvents, adhesives, paint, hardeners, thinners, fillers, primers, etc.



**ABRASIVE DISC FOR REMOVING HARDENED ORATEX® DISPERSION HOTMELT ADHESIVE** (ref. no.: 08490), **MOUNTING PLATE FOR ABRASIVE DISC** (ref. no.: 08495)

This abrasive disc and the corresponding adapter are the only tools approved by us for the effective removal of hardened **ORATEX®** DISPERSION HOTMELT ADHESIVE. It can be used for surfaces made of wood, metal, fiberglass and carbon fibre. It also fits on commercial and SPEED REGULATED angle grinders.



**TOOL FOR STRENGTH TEST** (ref. no.: 08485)

This tool is used for the strength and aging test of **ORATEX®** on your aircraft. This is used with Oratex instead of a Maule Tester or other type of destructive punch tester.



# EXAMPLES OF CUSTOMER-AIRCRAFT



**BEARHAWK 4 SEATER**  
Lars Fellman / New Zealand



**BELITE CHIPPER**  
James Wiebe



**HEAT STROKE RENO-RACER**  
Swaid Rahn



**BOEING REPLICA**  
Rick Human



**JAVRON CUB**  
Larry Vetterman



**CARBON CUB KITPLANE**  
Richard Wight / Alaska



**JUSTAIRCRAFT SUPERSTOL**  
Allan Ronk / Australia



**REDBULL-RACER NUMBER26**  
Juan Velarde / Spain



MADE IN GERMANY by



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