

## F-Wrap Ultimate 1000

**PRODUCT DESCRIPTION / BENEFITS** F-Wrap Ultimate 1000 series is a multi-layer premium cast vinyl designed for vehicle wrapping. This series is available in gloss, satin and matt finish. Its superior conformability allows application on 3D areas such as rivets, concave and convex surfaces. The Slide & Tack adhesive system allows a very low initial adhesion during the first minutes (even after squeegeeing) providing great positioning, slide ability and repositioning during the film installation. Eventual air bubbles can be easily removed by pressure: the air will escape through the micro-structured Slide & Tack adhesive layer. Product REACH & RoHS compliant.

**TYPICAL USE**

- Fleet wrapping
- Vehicle customisation
- Boat wrapping (above the water line)

**CONSTRUCTION**

- **Face film:** 90 µm multi-layer premium cast vinyl (120 to 140µm for structured)
- **Adhesive:** repositionable transparent/grey solvent-based acrylic
- **Release liner:** Slide & Tack, micro-embossed PE coated kraft paper 140 g/m<sup>2</sup>

**Products:**

F-Wrap Ultimate 1000: Gloss colours

F-Wrap Ultimate 1100: Gloss Metallic

F-Wrap Ultimate 1200: Matt colours

F-Wrap Ultimate 1300: Matt Metallic

F-Wrap Ultimate 1400: Satin colours

F-Wrap Ultimate 1500: Satin Metallic

F-Wrap Ultimate 1800: structured

**CONVERTING METHOD** No need of lamination film, can directly be applied on vehicle surface.

**APPLICATION METHOD / INSTRUCTIONS FOR USE** Only suitable for dry application on clean and degreased surfaces at temperature above 15°C, ideally at 20°C. The vinyl needs to be heated at 35-40°C before being conformed to 3D areas. During application onto these 3D areas, considerable tension will be introduced in the material which is essential to release. This tension will be released by post-heating the material to 90°C. Without this stabilisation, the vinyl may pop-out of the recesses later. Adhesion build-up curve is low under 15°C. In wintertime, the wrapped car needs to remain inside premises at 20°C for 24 hours. If the car needs to be released outside earlier, we recommend to first warm-up all film surfaces to 35 - 40°C before moving the car outside.

**SHELF LIFE** Shelf life is 2 years, when stored at 23 °C and 50 % relative humidity conditions. Higher temperatures and/or humidity levels will reduce product shelf life.

**EXPECTED DURABILITY**

Products	Vertical			Non-Vertical / Horizontal		
	Zone 1	Zone 2	Zone 3	Zone 1	Zone 2	Zone 3
White & Black	12 years	8 years	6 years	6 years	4 years	2 years
Flat colours	8 years	5 years	3 years	4 years	2.5 years	1 year
Metallic colours	5 years	3 years	2 years	2.5 years	1.5 year	6 months

Application on Watercrafts: Above data decreased by 30%.

This information is based on real life experience and artificial aging according to ISO 4892-2.

Note: Exposure to severe temperature and ultra-violet light will cause a quicker deterioration. This applies also to polluted area, high altitude, horizontal applications, and south-facing exposure in north hemisphere.

## F-Wrap Ultimate 1000

**PHYSICO-CHEMICAL PROPERTIES / TYPICAL VALUES**

Face thickness, without adhesive	90 µm (120-140 µm for structured)	ISO 534-80
Face thickness, with adhesive	120 µm (150-170 µm)	ISO 534-80
Tensile strength (machine direction)	> 15 N/cm	ISO 527
Elongation at break (machine direction)	> 150%	ISO 527
Fire resistance on aluminium	Self-extinguishing	ISO 3795:1989
Dimensional stability (1 week @70 °C on glass)	0,2 mm	FTM 14
Adhesion on glass		FTM 1
- 20 minutes	7 N/25mm	
- 24 hours	12 N/25mm	
- 1 week	14 N/25mm	
Minimum application temperature	+15 °C	
Service temperature	From -40 °C to +90 °C	
S&T micro-embossed liner	140 g/m <sup>2</sup>	ISO 536
Humidity resistance	No effect	200 hours exposure
Water resistance	No effect	24 hours immersion
Detergent (1% solution)	No effect	24 hours immersion
Isopropyl alcohol / Water (20/80)	No effect	10 minutes immersion
Sporadic contact with hydrocarbons	No effect	5 minutes immersion

**QUALITY CERTIFICATION**



**DISCLAIMER**

Information on physico-chemical characteristics and values in this document are based upon tests we believe to be reliable and do not constitute a warranty. They are intended only as a source of information and are given without guarantee and do not constitute a warranty. Purchasers should independently determine, prior to use, the suitability of this material to their specific use. All technical data are subject to change. All Fedrigoni products are sold subject to terms and conditions of sale. For more information, contact your Fedrigoni sales representative. In case of any ambiguities or differences between the English and foreign versions of this document, the English version shall be prevailing and leading.