

## **TOPICS**

WHAT IS A WATER SLIDE DECAL

SUBSTRATES FOR APPLICATION

WHEN USING A WATER SLIDE DECAL

WHY USING WATER SLIDE DECALS

THE PRINTING STEPS

THE PRINTING PROCESS AND CONDITIONS

DECAL APPLICATION



## WHAT IS A WATER SLIDE DECAL

It is an indirect printing system, based on the realization and application of a graphic transfer, for the decoration of such substrates, which, due to their dimensions or essential features, make direct printing difficult or impossible.



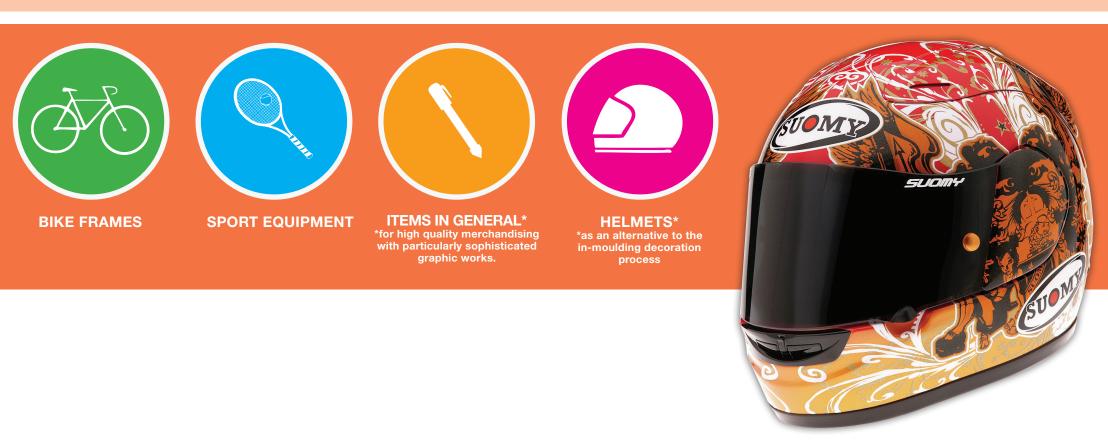


The essential requirement for this application is the varnishing of the substrate, which may be made of metal, fiberglass or every kind of plastics: polyethylene, polypropylene, PVC, PETG, PC, ABS.



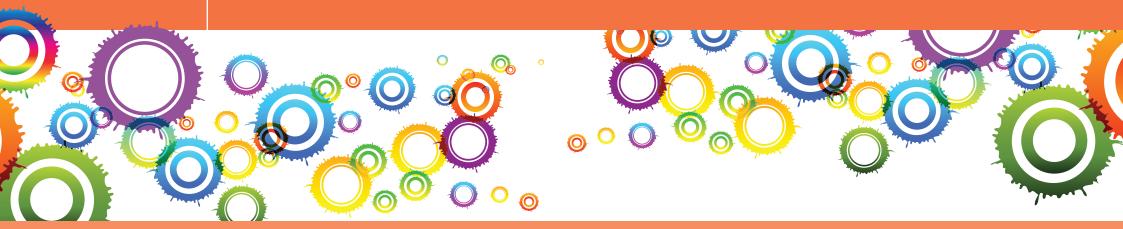
## WHEN USING WATER SLIDE DECALS

The application fields are many:



## WHY USING WATER SLIDE DECALS

- Because it is possible to realize every graphic work. It is ideal for those sectors, which are attentive to communication and are influenced by the designers.
- Because they have a limited thickness [25-30] micron, if compared with the self-adhesive materials [100] micron, so they are perfectly integrated with the object.
- Because the mandatory over-varnishing allows to increase the general fastness, and in particular the mechanical resistance.



## THE PRINTING STEPS



**Special Paper** which assures an excellent register and a high definition

01 PRINT

PRINTING OF THE WHITE INK

Printing of the chosen white ink of the series **Texylon**, which includes 2 white inks dedicated to the realization of the decals

**O**2

PRINTING OF THE GRAPHIC WORK

Printing of the colours, according to the chosen graphic work

03

PRINTING OF THE TRANSPARENT INK

Printing of the transparent ink, which protects the graphic work

04

PRINTING OF THE COLLODION

Printing of the collodion [fixed or peelable], which is the vehicle for transferring the decal from the paper to the substrate to be decorated





### TRANSFER PREPARATION



# PRINTING & CHOICE OF THE WHITE INK

It is possible to choose between:



### TRANSFER PREPARATION



## PRINTING & CHOICE OF THE WHITE INK

The choice of the white ink depends on the desired final result and the printing tools

PRODUCT	SCREEN		DILUTION	DRYING	
58.101 TEXYLON BIANCO	[Th/cm] 77	Nr Strokes 2	Diluente 90.924 30%	T. °C 25-30 HR 60%	h 3-4
58.030 TEXYLON BIANCO DECALS	[Th/cm] 77	Nr Strokes 2	Diluente 90.924 30%	T. °C 25-30 HR 60%	h 3-4



### Drying must peremptorily take place with air or in a WICKET oven

The use of forced drying or different conditions as the ones mentioned in the table has a negative influence:

- on the flexibility of the transfer, compromising the final result
- on the dimensional stability of the paper [extremely critical factor], compromising the final result.



## TRANSFER PREPARATION



It is possible to choose among differen products offered by the **Texylon** series:

- SIXTEEN FULL COLOURS
- FOUR-COLOUR PROCESS INKS
- SIX TRANSPARENT COLOURS
- METALLIC PIGMENTS
  - PANTONE BASES FOR THE REALIZATION OF MORE THAN 900 COLOURS

### TRANSFER PREPARATION



## PRINTING & CHOICE OF THE COLOURS

The printing sequence must be chosen according to the graphic work to be realized: the only peremptory condition is the printing of the white ink as first printing colour

PRODUCT	SCREEN		DILUTION	DRYING	
58.000 TEXYLON COLORATI	[Th/cm] 77	Nr Strokes 1	Diluente 90.924 30%	T. °C 25-30 HR 60%	h 3-4



Wait for the perfect drying of the printed colour, before printing the next one: a bad drying will compromise the register and the stability of the realized transfer



### TRANSFER PREPARATION



## PRINTING OF THE TRANSPARENT INK

Trasparente 59.800 of the series Texylon perfectly adjusts itself to every need of flexibility and elasticity required by the process.

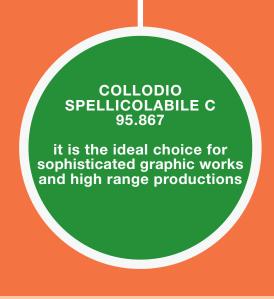
PRODUCT	SCREEN		DILUTION	DRYING	
59.800 TRASPARENTE	[Th/cm] 77	Nr Strokes 1	Diluente 90.924 10%	T. °C 25-30 HR 60%	h 12

- The transparent ink must be printend by keeping a 2-3 mm surplus in comparison with the register, in order to assure a perfect completing of the graphic work.
- The additive 90.912 [laying agent] must be added only if it is necessary to improve the laying of the transparent ink.
- In case, add 3% of 90.908 when the decal will be transferred onto a helmet which has to be over-varnished with a soft-touch varnish.

## TRANSFER PREPARATION



# PRINTING OF THE COLLODION



### TRANSFER PREPARATION



## PRINTING OF THE COLLODION

The peelable collodion allows to obtain decals having a lower thickness, which assure a better integration with the substrate to be decorated.

PRODUCT	SCI	REEN	DRYING	
95.867 COLLODIO SPELLICOLABILE	[Th/cm] 24	Nr Strokes 2	T. °C 25-30 HR 60%	h 24

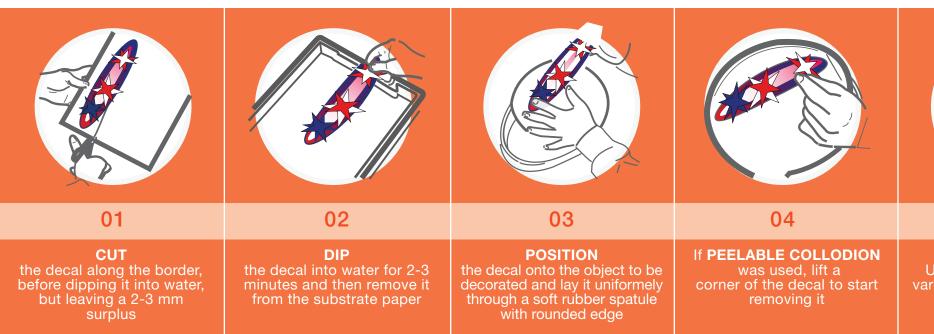


Driyng of the collodion layer is the most critical phase during the realization of the decals: its perfect drying allows to remove it optimally during the application of the decal, which would otherwise result to be difficult.

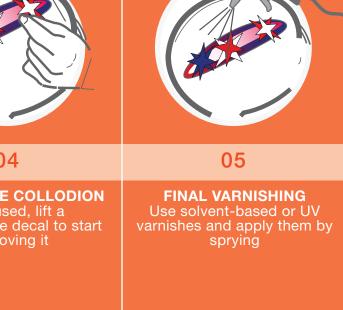


## **DECAL APPLICATION**

The application of the water slide decal is a very delicate operation, requiring an extreme precision



the object into a forced ventilation oven at 60°C during about 1 hour





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