

## Technical Data Sheet

# LF 3499

### IMAGin

The IMAGin products is a series of self-adhesives especially designed for overlaminating and protecting large and medium size digital prints.

### PRODUCT DESCRIPTION

LF 3499

- is an ultra clear gloss, soft 40µm cast PVC film coated on one side with an ultra-clear permanent adhesive. The adhesive is protected with an easy to remove liner.
- is suitable for internal and external applications
- helps retards the colour fade caused by ultra-violet (U.-V.) light exposure.
- does not influence the pH level of the substrate to which it is applied
- is especially designed for the protection of super soft, flexible printed media like JT5529 P/PM/MBF or JT5629 PM for the decoration of flat, riveted or corrugated surfaces (cut around deep corrugations is always recommended)
- is therefore designed for the total coverage of fleet decoration (car, trucks, caravans...)

### PHYSICAL PROPERTIES

	<u>Typical values</u>	<u>Test method</u>
<b><u>Adhesive data, 23°C</u></b>		
Quick Tack on glass (N/25 mm)	18	FTM 9
Peel 180° on glass (N/25 mm)		
- after 20 minutes	14	FTM 1
- after 24 hours	16	FTM 1
Dimensional stability, 48h at 70°C on aluminium	<0.1%	FTM 14
Flammability	Self-extinguishing	Sample mounted on aluminium
<b><u>Release liner</u></b>		
Clay coated white paper (gr/sqm)	120	ISO 536
<b><u>Thickness</u></b>		
Film + adhesive (µ)	70	ISO 534 (ASTM D 645)

### HEAT RESISTANCE

Application temperature range : + 5°C to + 40°C

End-use temperature range : - 30°C to + 100°C

*For temperatures outside those quoted above, please consult with MACtac.*

## **CHEMICAL RESISTANCE**

Resistant to short periods of immersion in water and short contact with detergents, alcohol and some aliphatic solvents. Not recommended for contact with ketones, esters, aromatic solvents and chlorinated hydrocarbons.

*For further technical advice, please consult with MACtac.*

## **SHELF LIFE**

2 years when stored at 15 to 25°C and ± 50 % relative humidity.

## **DURABILITY**

LF 3499 will give satisfactory performance up to 4 years of outdoor exposure depending on the geographical zone and exposure conditions. The durability does not relate to the image protected but only to the laminating film. See MACtac Warranties for more details.

Indoor exposure will increase the durability values of the laminating film.

**Note** : *These end-use life estimates are based on accelerated ageing studies and outdoor exposure, under conditions experienced in vertical exposure and in "normal" temperate climates. Exposure to severe humidity and ultraviolet light, as in southern European countries, and also in tropical, sub-tropical or desert regions, will cause a more rapid deterioration. This also applies to polluted areas, high altitude, horizontal and/or south-facing exposure where durability may be divided by 2..*

## **RECOMMENDATIONS**

- Where exposure to chemicals, solvents or high pressure water hoses is envisaged, it is recommended to seal the edges of the prints with varnish or silicone in order to avoid penetration of these liquids.
- Where possible, always test the proposed construction under actual application and end-use conditions because a 100% multi-purpose adhesive for all substrates does not exist.
- In order to reach the best result, it is recommended to apply IMAGin LF 3499 (onto the image) with the help of a professional laminator with a top cylinder temperature about 20-22°C max. It is also recommended to regulate the speed and the pressure when laminating to help avoid creasing and curling. Please be aware that excessive use of the tensioning/brake system, may result in edge lifting or shrinkage of the laminated image.
- When laminating digital prints, please ensure the print is perfectly dry before.
- **JT 5529 P/PM/MBF** and **JT 5629 PM** laminated with **LF 3499** can be rolled up to allow easy transport. The roll should have a diameter above 7 cm and the image should be facing outwards.
- **LF 3499 is not recommended for the lamination of one way vision perforated vinyl**

### **IMPORTANT NOTICE**

*All MACtac products are subject to careful quality control throughout the manufacturing process and are warranted to be of merchantable quality and free from manufacturing defects.*

*Published information concerning MACtac products is based upon research which the Company believes to be reliable although such information does not constitute a warranty.*

*Because of the variety of uses of MACtac products and the continuing development of new applications, the purchaser should carefully consider the suitability and performance of the product for each intended use, and the purchaser shall assume all risks regarding such use. The seller shall not be liable for damages in excess of the purchase price of the product nor for incidental or consequential damages.*

*All specifications are subject to change without prior notice.*

