

# ORAGUARD® 213

## Laminating Film

### Short description

Polymeric PVC laminating film with highly effective UV protection for outdoor applications.

### Front material

Partially polymer PVC film, 0.07 mm

### Liner

One-sided siliconized kraft paper, 90 g/m<sup>2</sup>

### Adhesive

Solvent-polyacrylate, permanent, Transparent, 0.024 mm

### Technical properties

#### RESISTANCE

|                                      |                                                                                                                   |                                                           |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
| Durability                           | with vertical outdoor exposure,<br>normal Central European climate                                                |                                                           |
|                                      | 4 Year(s)                                                                                                         |                                                           |
| Shelf Life                           | 2 Year(s)                                                                                                         | in original packaging, at 20 °C and 50% relative humidity |
| Resistance to solvents and chemicals | Weak acids, Salts and alkalis, Water,<br>Isopropyl alcohol, Washing suds<br>(0.5 % household cleaner)             | At room temperature                                       |
| Maximum shrinkage                    | Maximum shrinkage along 0.4 mm<br>Maximum shrinkage across 0.4 mm                                                 |                                                           |
| Elongation at break                  | Minimum elongation at break along<br>130 %<br>Minimum elongation at break across<br>150 %                         | Average value, DIN EN ISO 527                             |
| Tensile strength                     | Minimum tensile strength along 19<br>N/mm <sup>2</sup><br>Minimum tensile strength across 19<br>N/mm <sup>2</sup> | DIN EN ISO 527                                            |

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|                        |                            |                                 |
|------------------------|----------------------------|---------------------------------|
| Temperature resistance | Minimum temperature -40 °C | Short-term exposure up to 80 °C |
|                        | Maximum temperature 60 °C  |                                 |

### ADHESIVE PROPERTIES

|                |            |                                                            |
|----------------|------------|------------------------------------------------------------|
| Adhesive power | 12 N/25 mm | after 24 h, on stainless steel   Average value, FINAT TM 1 |
|----------------|------------|------------------------------------------------------------|

### PROCESSING

|                         |                           |
|-------------------------|---------------------------|
| Application temperature | Minimum temperature 10 °C |
|-------------------------|---------------------------|

### PRODUCT NOTE

Due to the diversity of prints and printing techniques, the user should test the suitability of ORAGUARD® laminating films for the specific print purpose, prior to use. Furthermore the application information published by ORAFOL must be followed. number of print images to be protected and the different printing methods used to produce them, it is essential for the processor to check the suitability of ORAGUARD® protective laminates for the respective print image.

### IMPORTANT NOTES

All ORAGUARD® products are subject to careful quality control during the entire manufacturing process. It is guaranteed that the products are delivered in merchantable quality and free of manufacturing defects. The traceability of our goods in accordance with ISO 9001 is ensured by means of the roll number. The information published on ORAGUARD® products is based on research results which the company believes to be reliable, but which do not constitute a guarantee. Due to the wide variety of uses of ORAGUARD® products and the continuing development of new applications, it is the responsibility of the purchaser to carefully evaluate the suitability and performance of the product for its intended use. Furthermore, the processing instructions issued by ORAFOL must be observed. The purchaser bears all risks arising from the use of these products. All information is subject to change without notice.