

## Equipped with the Self-healing Property under Normal Temperatures "QUATECT®", Newly Renamed QUATECT NANO, is On Sale

A total solution proposed to prevent long-term deterioration by external factors

NOTE: This product will be released overseas after May, 2021.



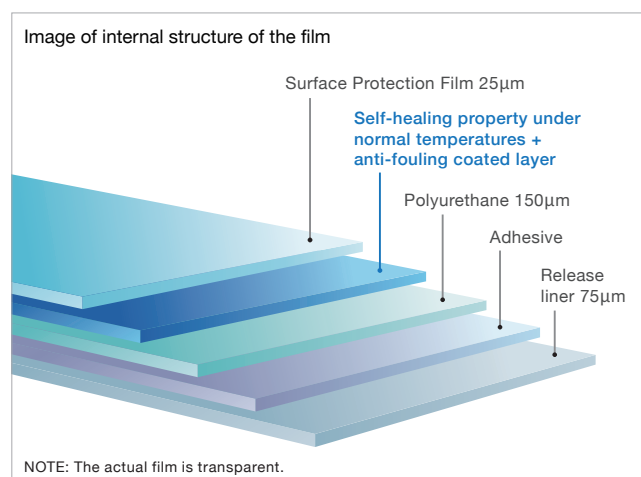
FE TRADE adds the self-healing property under normal temperatures to UNIGLOBE protection film QUATECT NANO and starts offering this new product as "QUATECT®". This product is really effective not only on car body but also on headlights where maintaining the transparency is important and other parts like trim moldings due to the newly developed special top coat layer which provides both "self-healing property under normal temperatures and anti-fouling performance". UNIGLOBE will keep evolving protection film business and offering total solutions.

### ■ Background of the Launch

Protection film has become established as an important item to maintain beautiful appearance of cars from the protective aspect. QUATECT NANO has continued to evolve its functionalities, such as anti-fouling and water-repellent properties, and has been offered as a high quality product of UNIGLOBE series, but deterioration over time, caused by accumulation of fine scratches by various suspended matter in the air and while driving, was inevitable. Currently in the market, there are a lot of films with the self-healing function to prevent scratches, and all those products use thermoplastic property, which is the characteristic of the materials. From the viewpoint of usability, FE TRADE developed a special top coat layer which achieves both "self-healing and anti-fouling properties" without being affected by the thermal environment. We adopted the newly developed self-healing function under normal temperatures to the former QUATECT NANO and finally released "QUATECT®" whose effects are instantly noticeable and clearly different from other products, thus meeting the needs of end users.

### ■ Characteristics of the Product

- **Self-healing under normal temperatures by the special top coat layer**
- **Excellent drainage by the adhesive layer with special treatment**
- **Easy installation which reduces adhesive smudge marks**
- **Astonishing anti-fouling by the fluorine resin**
- **93.6% of UV reduction**  
NOTE: Actual measurement using the JIS S3107 (Adhesive film for automotive windows) testing method
- **Excellent color reproduction**
- **Absolutely long-lasting water-repellency**
- **Transparency without haze**
- **More flexible than any other companies' films**



## ◎ Physical Data (Evaluation for the self-healing performance)

### (1) The test results of the durability

	Conditions	Other company's self-healing product	QUATECT
CTRL	Room temperature	Unrecovered (after more than one hour)	20 - 25 seconds
Accelerated installation test	60°C 95% after 400h	Unrecovered	20 - 25 seconds
	80°C Dry after 400h	Same as above	Same as above
Accelerated weathering test	after 1000h	Same as above	Same as above
	after 2000h	Same as above	Same as above

NOTE: The time for the films to be fully healed is measured after scratching them ten times by a brass brush at the room temperature.

**- It keeps the self-healing property after accelerating the adhesive under the hot or hot and humid environment.**

**- It keeps the self-healing property after the weatherability test.**

**→Evaluation is ongoing.**

### (2) Temperature environment Stretching performance

	Conditions	Other company's self-healing product	QUATECT (3.5μm)
CTRL	Room temperature	Unrecovered (after more than one hour)	20 - 25 seconds
	At 40°C	25 - 30 seconds	Within one second
	At 0°C	Unrecovered	Unrecovered
Installation by stretching	Stretching 110%	Unrecovered	1 minute 48 seconds
	Stretching 120%	Unrecovered	3 minutes 3 seconds

NOTE: Our company's test result in February, 2020. The healing performance of the scratch: The films are scratched by a brass brush five times. Stretching performance: They are measured by the stretching machine.

**- It depends on the temperature. : The scratches disappear instantly when it is hot while it takes longer when it is cold.**

**(The healing performance of the scratch can be seen when the car body gets warm even in cold climates.)**

**- The healing performance of the scratch differs depending on the extension degree of the films.**

## ■ From the Section in Charge

Since protection films are already popular around the world, we developed this product thinking about what kind of added value and unique characteristics are sought after. We believe that we surely succeeded to put the product value to the higher grade by adopting the self-healing function under normal temperatures to the anti-fouling layer on the film surface. This characteristic is visibly noticeable, and thus is really appealing to the end users.

## ■ Product Summary

Product Name : UNIGLOBE PPF QUATECT

Size : 6inch (155mm)×15m / 12inch (305mm)×15m / 24inch (610mm)×15m / 36inch (915mm)×15m / 48inch (1220mm)×15m / 60inch (1525mm)×15m

## Contact Details

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