

**A completely new formula has been developed using only fluorine-based ingredients to enhance durability and contact angle performance.**

### **Launch of "ECHELON Clareed7"**

With improvements in auxiliary materials, the product achieves excellent cost performance and allows efficient application with a minimal product use.

FE TRADE Co., Ltd. is pleased to announce the launch of the new ECHELON series product, "ECHELON Clareed7", starting from June 1st, 2026. This new product features a redesigned formula that eliminates conventional IPA-based solvents and uses only specially selected fluorinated solvents. Clareed7 achieves outstanding hydrophobic performance with a contact angle of 110°, also delivers improved dispersibility, and long-lasting durability. By overcoming the traditional weaknesses of fluorine-based coatings, the product helps maintain clear visibility for an extended period.

Clareed7 also adopts a single-component system, eliminating the need for mixing process. This reduces product waste and simplifies liquid management while ensuring stable quality and efficient application. A highly durable coating layer can be formed with just one single application. Furthermore, with a specially developed application cloth, it allows smooth and even coating with a minimal product use, helping improve work efficiency significantly.

NOTE: FE TRADE holds a patent (Patent No. 7731168) for our own proprietary technology that reduces the required liquid use during application.



#### ■ Background to Launch

The previous Clareed product utilized a two-component mixing system that provided stable performance by maximizing the coating's characteristics. However, issues such as mixing complexity, excess unused liquid, and liquid management remained unavoidable challenges. In addition, conventional fluorine materials were dissolved using organic solvents such as IPA, which resulted in some loss during fluorine adhesion to the glass surface. Clareed7 was developed to eliminate these factors that limited performance and to further maximize coating effectiveness.

In recent years, sudden heavy rain caused by weather change has increased significantly, leading to renewed awareness of the importance of maintaining clear visibility while driving. Clareed7 was therefore developed as a high-value product that contributes not only to convenience but also to driving safety through long-lasting visibility performance.

## ■ Characteristics of the Product

### ◎ **110° Contact Angle - Water Repellency, Water Shedding and Durability Enhanced With a New Formula**

The newly developed formula by using only fluorinated solvents, achieves exceptional hydrophobic performance with a 110° contact angle, along with outstanding water dispersibility and durability.

### ◎ **Single-Component Formula — No Mixing Process Required**

The single-component system eliminates mixing procedures, reduces liquid waste and management burden, and achieves both stable quality and efficient application with excellent cost performance.

### ◎ **Excellent Adhesion to Glass Surfaces for Reliable Single Application**

The specially formulated fluorinated solvent enables smooth application and ensures consistent, even coating layer in a single application.

### ◎ **Special Application Cloth (Patent No. 7731168) Allows Efficient Use with Minimal Product Use**

The specially processed cloth prevents liquid penetration to the reverse side of the cloth, allowing even and uniform application with an extremely small amount of product.

## ■ From the Section in Charge

For several years, we have continued improving this product with two key goals in mind:

“reducing application complexity” and “maximizing and fully fixing fluorine performance onto the surface.”

There were many technical challenges involved in maximizing fluorine performance without relying on organic solvents such as IPA. However, we successfully overcame these challenges through three major innovations:

**-Upgrading the coating liquid to a single-component system**

**-Eliminating organic solvents and using only specially formulated fluorinated solvents**

**-Developing a special application cloth capable of achieving even coating with a minimal amount of liquid**

Through these three core technologies, we have created a product capable of delivering fluorine performance at an unprecedented level.

## ■ Product Summary

[Product name] ECHELON Clared7

[Kit contents] ECHELON Clared7 30 ml x 2 bottles /

Application sponge x 1 / Application Cloth x 15 / Stickers x 15 / Instruction Manual x 1

NOTE: ECHELON Clared7 will be discontinued once the current stock is sold out.

### Contact Details

<https://www.fe-trade.com/page.php?pld=32>