# **TDS** Technical Data Sheet



# Glass Screen Anti-fouling and Anti-scratch Nano-coating Liquid K2S

No. PQ-RD3-TK001

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#### Introduction

Glass screen is easy to adhere to fingerprints and stains and cause scratches, which affects the appearance, smoothness, and even touch accuracy. This product is designed to address above problems. As is known, fluorochemicals have many excellent properties such as water and oil repellency, low friction coefficient, abrasion resistance, corrosion resistance and UV resistance. Then, we introduce advanced technologies from Japan and Taiwan which can be strongly combined with silicon Si-bonds in glass and finally form a nano-coating with ultra-thin thickness of about 15 nm and fuctions of anti-fouling, self-cleaning and scratch resistance, etc.

### Composition

Perfluorosilane compound, fluorine solvent, coupling aid.

#### Features & Benefits

- · Easy to clean, high hydrophobicity
- · Reduced oil and fingerprint adhesion
- Enhanced surface smoothness
- Enhanced wear resistance
- · Antibacterial

## **Applications**

This product can be applied to the surface of various inorganic silicate glass materials, such as screen glass, tempered glass film, automotive glass, bathroom glass, etc. It can not be used on plexiglass surface.

# **Typical Properties**

Item	Values	
Appearance	Transparent colorless liquid	
Relative density	1.78, 25℃	
Viscosity (cSt)	0.8, 25℃	
Surface dry time	Normal temperature: 10-20 min	
Actual dry time	24h	

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Volatility Volatile

#### **Test Data**

Test Item	Test Method	Initial Value	<b>Test Results</b>
Contact angle for water	GBT 30693-2014	114-117°	-
Contact/sllide angle for oleic acid	GBT 30693-2014	79°/(<5°)	-
Contact/slide angle for hexadecane	GBT 30693-2014	74°/5°	-
Contact angle for water after boiling test	1h	115°	113°
Contact angle for water after water resistance test	24h	115°	113°
Contact angle for water after alkali resistance test	NaOH (pH 12.0), 24h	115°	113°
Contact angle for water after acid resistance test	HCl (pH 1.0), 24h	115°	115°
Contact angle for water after brine resistance test	NaCl (5%), 24h	116°	114°

## **Operating Instructions**

- Before use, use the dust-free cloth (100 grade) dipped in alcohol to wipe the glass in one direction until dry and clean.
- A variety of methods such as shower coating, spray coating, dripping, and smearing are available (It is normal to volatilize quickly).
- Processing: at room temperature or baking.
   If baking, it is recommended to bake at 150°C for 30 minutes (suitable for batch production).

#### Cautions

- The higher the surface cleanliness, the better the adhesion and the longer the duration.
- In case of water failure, sealed storage and keep the nanofluid out of water.
- Strong volatility: keep out of heat and wind to avoid waste.

## Storage

- Store in a light resistant container, preferably made of HDPE fluorinated bottles.
- Store in a sealed container away from light and heat, and in a cool dry place.
- · Avoid the effects of moisture and dust.
- If the container is used frequently, a smaller sealed container should be replaced to reduce the volatilization caused by multiple opening of the lid.
- The used product can be recycled for later use. It is recommended to filter as soon as possible and then sealed in another separate container.
- Shelf life: 180 days.

# Safety Instructions

- Environmentally friendly and non-toxic, non-combustible and non-explosive, RoHS compliant and halogen-free.
- Please dispose of this product properly after use, do not discard it.

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- Please keep out of the reach of children.
- No stimulation to skin. Please clean with soap after contact.
- Keep out of eyes. If in eyes, please rinse well with plenty of water immediately, and seek medical advice promptly.

# **Package**

1kg / bot

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