

# **Technical Data Sheet**

# **COVEN FP3105**

### Electronic grade coating

FP3105 is a fluorine anti-fouling and anti-fingerprint surface coating agent, which can be coated on different substrate surfaces to achieve anti-fouling, water and oil repellent, anti-fingerprint, smoothness, and other effects. The main component is fluorinated compound modified silane. The hydrolyzed silicon hydroxyl group condensates with the silicon hydroxyl group on the glass surface to form a strong chemical bond, improving the wear resistance of the coating. FP3105 is widely used in mobile phones, optical lenses, touch screens, and other fields.

#### FEATURE

- Excellent hydrophobic and oleophobic
- Anti-fingerprint
- Excellent smoothness
- Very high permeability
- Abrasion resistance

# LIQUID PROPERTIES

Properties	FP3105
Chemical nature	Fluoropolymer
Color	transparent
Solid content	20% weight
Solvent type	Hydrofluoroether
Density (g/ml at 20ºC)	1.43
Recommend coating thickness	< 10 nm

# FILM PROPERTIES

Properties	ltem		FP3105
Water and oil repellent	Static contact angle	Water	116 <sup>0</sup>
		Oleic acid	76 <sup>0</sup>
		Cetane	68 <sup>0</sup>
	Dynamic contact angle	Water	6 <sup>0</sup>
		Oleic acid	4 <sup>0</sup>
		Cetance	6 <sup>0</sup>
Antifouling property	30 dyne pen		Good
	Marker pen		Good
	Fingerprint wipeability		Good
Smoothness	Coefficient of dynamic friction		0.03
Abrasion resistance	Steel wool	3000 times	112
	Eraser	3000 times	111

# **APPLICATION TECHNIQUE**

- This material can be applied by spray, dip, brush or selectively dispense.
- It can be dried at room temperature, the surface drying time is about 5 minutes. Thermally cure at 150°C for 30 minutes if thermal testing at 175°C is required.

# SHELF LIFE

When FP3105 is stored at 10 - 20  $^{\rm O}{\rm C},$  the shelf life is 36 months

# STORAGE

The product should be stored in a clean, dry, well ventilated, and dust-free environment

# CAUTION

1) The normal protection and industrial hygiene regulations of the local chemical treatment must be observed, and the thermal decomposition products must not be inhaled. Avoid skin contact with high-temperature substances.

2) Do not eat, drink or smoke when using this product. Clean thoroughly after operation. Avoid release into the environment. Avoid contact with oxidizing agents (e.g. chlorine, chromic acid, etc.).

3) When using this product, you should follow the information and recommendations provided in our chemical safety technical manual. Basic precautions for handling chemicals should also be in place

For specific information on this product, consult the Material Safety Data Sheet.

The data contained in this bulletin is provided only as a guide for evaluation/consideration. These material characteristics are typical properties that are based on a limited number of samples tested in the laboratory. We cannot assume responsibility for results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any product or method. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide.

Issue date: March 2023

info@gluditec.com