

Excellent releasability Fluoropolymer FEP coating powder

PRODUCT INFORMATION

FEP (Fluorinated Ethylene Propylene) coating powder can easily make smooth surface without pinhole. FEP film with appropriate primer helps to demonstrate strong adhesion to metal substrate and displays excellent chemical resistance and moisture resistance, thus protects metal substrate from corrosion for a long time. In addition, this FEP coated film is increasingly applied to film lamination processes by utilizing its non-adhesive property.

Features of FEP coating powder

Fluoropolymer coated film exhibits outstanding weatherability, heat resistance, and non-adhesive property. This is widely used in various industries and applications by taking advantage of these properties.

In particular, FEP coated film shows the following characteristics. It has great potential for release applications.

(1) Release properties

FEP coated film indicates remarkable non-adhesive property. It is suitable for the application requiring release from other materials.

Fig.1 Peel strength of polymer film from metal substrate (Testing methods : JIS Z 0237)



(2) Chemical resistance

Fluoropolymers consist of $-CF_2-$ which is one of the strongest single bonds. They demonstrate noticeable resistance against many chemicals like solvents, acids, and alkalis. Especially, FEP can be used for a long time, because it keeps chemical resistance even under high temperature range.

(3) Heat resistance

FEP shows excellent heat resistance, displaying stable release property in the high temperature range exceeding 100°C.

(4) Processability

FEP has lower melting point compared to other perfluoro polymers. FEP powder can make film by being sintered about 300°C, which is lower than PFA powder.

The benefits of coating

(1) Easy to coat various shapes

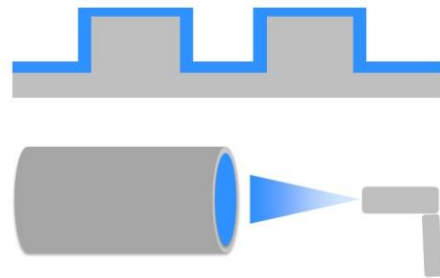
Smooth and thin film coating can be evenly applied to substrates and adheres to metal surfaces of various shapes. This helps to exhibit outstanding release property on many metal substrates.

Fig.2 Solid film (image)



Remains gaps between mold and solid film.

Fig.3 Coated film (image)



Easily makes even coated film on various shapes of substrate.

(2) Durability

Properly applied FEP coated film strongly adheres to substrate and maintains the characteristics for a long period.

Expected applications

FEP coating powder has a potential to meet a variety of fields beyond release application.

- Release property : Metal mold release, alternative to solid release film.
- Corrosion resistance : Chemical storage tank and hopper.
- Flame resistance : Exhaust duct in semiconductor manufacturing facility.
- Insulation : Busbar

If you have any questions or sample requests, please feel free to contact us.

*The above properties are representative and not guaranteed.

For more information, visit our website.

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