PTFE D60

Everflon™ Fluoropolymers

Aqueous Dispersion

DESCRIPTION

Everflon™ PTFE Dispersion D60 is a milky white aqueous PTFE dispersion stabilized with a non-ionic surfactant. It is a general-purpose product, often preferred for coating and impregnating woven goods and for some coating processes. It imparts properties unique to PTFE resin to porous structures, as well as to base materials when used as an additive. When properly processed, the PTFE resin in Everflon™ PTFE D60 exhibits the superior properties typical of the fluoroplastic resin: retention of properties after service at 260 °C (500 °F) and useful properties at –240 °C (–400 °F).

Everflon™ PTFE D60 aqueous dispersion provides:

- Inertness to nearly all industrial chemicals and solvents
- Stability at high temperatures
- Excellent dielectric properties
- Lowest coefficient of friction of any solid material
- Excellent weatherability
- Non-stick characteristics

DATA LIST

Typical Property Data for Everflon™ PTFE D60

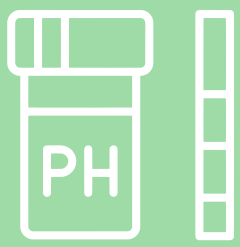
Particle Size
ASTM D4441

0.28 µm

Solids Content
ASTM D4441

60 %

pH of Dispersion
ASTM D4441



9

Brookfield Viscosity
ASTM D2196

15~30 Mpa.s

TYPICAL APPLICATIONS

Application&Function	C	F	P
Coated woven fiber-glass fabric used in architectural, industrial, food processing, and electronics applications		●	
Impregnated packing made from braided fibers for severe chemical and thermal service		●	●
Cast film for capacitor dielectrics or chemical barriers		●	
Surface coatings for metallic or other high-temperature substrates			
Anti-drip additive for plastics			●
Binder for battery anode or cathode materials			
Formulated surface non-stick coating	●		
Formulated primer not-stick coating			●

PACKAGING

Everflon™ PTFE Dispersion is packaged in 30L PE drum with 25kg (55lb) content and 1000L IBC drum with 1250kg (2750lb) content.

PROCESSING GUIDE

Conventional dip or flow techniques can be used for coating or impregnating high temperature fabrics, fibers, and other products with Everflon™ PTFE D60. A continuous PTFE resin coating on woven fabrics made of fiber-glass, aramid fiber, or other high temperature-resistant fibers can be made by dip coating. Multiple passes may be used to build the desired thickness to produce a smooth, crack-free coating.

Everflon™ PTFE D60 is formulated to provide good rewetting on each pass. Each coating layer is usually dried to remove water (typically at 120 °C [250 °F]), baked to remove the wetting agent (typically at 270 °C [518 °F]), sometimes calendered, and finally heated above the crystalline melting point of the resin particles (approximately 337 °C [639 °F]).

Products utilizing entrained PTFE resin particles only for their lubricating or hydrophobic properties are dried and baked, but not heated above the crystalline melting point of the particles. For example, rope-like products, such as shaft packings, can be made from braided yarn in a variety of cross sections. The dispersion wets internal surfaces and promotes penetration of the small PTFE particles. The unmelted particles are sheared and retained as an impregnant, even when compressed in service and exposed to steam or chemicals. Unmelted particles can also improve flexibility and flex life in woven fabrics used in hot-gas filtration applications.

The details please visit www.everflon.com or refer

Everflon™ Fluoropolymer Dispersions Application Guide.

PRECAUTION

Equipment used to process at melt temperatures should be provided with local exhaust ventilation (LEV) to completely remove all fumes and vapors from the processing area. In addition, care should be exercised to avoid the contamination of cigarettes and other forms of smoking tobacco when using fluoroplastic resins. Before processing any fluoroplastics, read the Material Safety Data Sheet.

STORAGE AND HANDLING

Ammonium hydroxide is used by Everflon™ to set the pH to 9.5–11.0 at the time of shipment. High ambient temperatures can deplete the ammonium hydroxide level and reduce pH.

Declining pH eventually favors bacterial growth, which causes odor and scum. The pH of opened containers should be measured and maintained between 9.5 and 11.0.

High-speed stirring, pumping, or any other violent agitation must be avoided to minimize sheared particles, coagulation, and foaming. Ideally, the dispersion should be conveyed by gravity from storage to processing stations.

Everflon™ PTFE D60 must be properly stored to maximize the stability of the dispersion. The PTFE particles will settle on prolonged standing and/or on prolonged heating— temperatures above 40 °C (104 °F) should be avoided.

The dispersion must be protected from freezing, which will cause irreversible settling. The optimum storage temperature range is 7–24 °C (45–75 °F). If dispersions are to be stored for extended periods, lower-temperature storage is desirable.

For optimal performance, Everflon™ PTFE D60 should be gently mixed or rolled monthly and prior to use.

Storage and handling areas should be clean.Keep dispersiondrums closed and clean to avoid both contamination and coagulation by drying at the liquid surface. High processing temperatures will cause even very small foreign particles to become visible and/or to make defects in finished products.Good housekeeping and careful handling are essential.

ABOUT C&F AND EVERFLON FLUOROPOLYMERS

Everflon™ is brand of C&F Group dealing in fluoropolymers materials including PTFE.FEP.PFA.ETFE and PVDF. On the basis of Everflon, C&F also developing the fluoropolymer applications including tubing,coating and films.

More information could visit www.everflon.com or Everflon™ Fluoropolymers Introduction and C&F Chemicals Book

For more information, visit www.everflon.com
For sales and technical support contact, please contact info@everfloncom

Everflon Fluoropolymer co.,ltd
Fuqiao Industrial Park,C&F Ave,Chaidian,Wuhan, China. 43100
Tel:+86-185-7168-9228