
AGC
Asahi Glass is one of the world's leading
fluorochemical manufacturers

High performance fluoropolymers

Fluon® ETFE

Fluon®ETFE has excellent processability and good heat resistance. The mechanical and electrical insulation properties are also outstanding. It is available as pellets and powders. In pellet form it is suitable for extrusion and injection moulding. When supplied as powder it can be used for rotational moulding and electrostatic coating.

Applications of Fluon®ETFE include wire and cable coating for automotive applications, robotics and electronic equipment, coatings and linings for chemical equipment, tubes, films, sheets, tape and parts for the semi-conductor industry.

Fluon® LM-ETFE

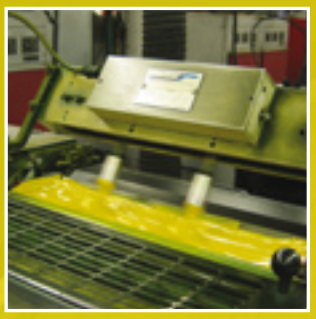
Fluon®LM-ETFE has better thermal stability, heat resistance, stress crack resistance and is more flexible and transparent than standard ETFE. The LOI (limiting oxygen index) is also improved. It can be moulded at a wider range of temperatures due to its improved thermal stability and lower melting point. Applications include multi-layer fuel hose, filter media, wire and cable, valves housings, film and sheet.

Fluon® ETFE/FEP COLOUR CONCENTRATES

Fluon® Colour Concentrates are a full range of colour master batches suitable for ETFE, high flow ETFE, high flow FEP and PFA. They are available in red, brown, orange, pink, violet, yellow, green, blue, black, grey and white and are supplied as cylindrical pellets.

Technical information is available from the AGC Chemicals Europe, Ltd. sales office
Tel. +44 (0) 1253 861963 or email: info@agcce.com

PTFE resins - a proven track record



Fluon® PTFE

Fluon® aqueous dispersions (ADs) have been developed for coating metal and impregnating glasscloth and packings and for coagulation with pigments or fillers. Applications include conveyor belts, kitchen cookware, electronics, textile architecture and industrial applications.

Fluon® granular PTFE is used in the form of pre-sintered powder for ram extrusion and in the form of non free flow powder for moulding and as feedstock for filled compounds.

Fluon® lubricant powders are manufactured from virgin PTFE feedstock and are used either as dry lubricants or as additives in other materials such as plastic compounds, rubbers, fluoroelastomers, inks, paint, oils and greases. Fluon® lubricant powders are FDA 21CFR 177:1550 (U.S. Food and Drug Administration) and EU food contact approved so are ideal as additives in coatings which are in contact with food and drink, such food processing equipment and can coatings. They also give enhanced lubricity, non-stick properties and reduce friction, all of which are important in a wide range of applications.

Fluon® coagulated dispersions (CDs) have been developed for paste extrusion into pressure tubes (e.g. hydraulic systems), hose, pipe liners, electrical wire and tape. Fluon® CD grades are also used as membranes and technical fibres for textiles and industrial applications.

Unique products for demanding environments

Fluon® PFA has excellent chemical resistance, low friction and non-stick properties. It also has good electrical and mechanical properties and resists UV light and other environmental elements.
As with other thermoplastic resins Fluon® PFA can be extruded, injection moulded, blow moulded and transfer moulded. This unparalleled fluoropolymer can be used within the temperature range –200°C to +260°C. Typical applications are tubes, blow-moulded items, linings and wire coatings.

AFLAS® FLUOROELASTOMERS

AFLAS® fluoroelastomer is an alternating copolymer of tetrafluoroethylene and propylene. This type of structure gives AFLAS® unique properties over conventional FKM type fluoroelastomers such as high base and acid resistance plus excellent electrical properties. AFLAS® is highly resistant to ozone, heat, steam and a wide range of solvents and chemicals.
AFLAS® 300S is also a TFE/P alternating structure with a cure site monomer built into the polymer chain.
The raw gum is transparent in colour thus giving greater colour options for the final product and it also has improved processing characteristics.

AFLAS® is used as O-rings, gaskets, packings, diaphragms and hoses in the automotive, offshore, chemical, power plant, wire and cable and fabric coating industries.

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High performance films

Fluon® ETFE FILM

Fluon®ETFE FILM is a high-performance film produced from Asahi Glass' own ETFE resin. Films of thickness between 12μm and 250μm are manufactured using a unique film-forming method. Properties of the film are excellent heat resistance, chemical resistance, anti-stick properties, electrical insulation properties and long-term weatherability.

Due to its exceptional durability, UV light transparency and anti-fouling properties, Fluon®ETFE FILM is used in outdoor architectural applications, greenhouses, solar cells, interior design and various other innovative and ground-breaking areas where film is used. Due to its low surface energy and resistance to both heat and chemicals Fluon®ETFE FILM is also used as a mould release film for components in primarily the electronics and aerospace industries.

F-CLEAN®

F-CLEAN® is a thin ETFE film for use in greenhouses, designed to increase the yields of horticultural plants, fruit and vegetables. F-CLEAN® has low surface energy which gives it non-stick and self-cleaning properties which last over a decade.

F-CLEAN® allows maximum UV light transmission to ensure earlier harvest of better quality fruit and vegetables and more colourful flowers.

Protective coatings

CYTOP®'s amorphous state, quite different from conventional fluoropolymers, makes it 95% transparent. Dissolved in a special fluorinated solvent it can form ultra-thin film coatings of sub-micron order. This advanced material also retains all the traditional advantages of conventional fluoropolymers, such as fire and chemical resistance, electrical insulation characteristics, water and oil repellency and thermoplastic mouldability.

LUMIFLON™ is a fluoropolymer based paint resin that maintains excellent gloss and colour for decades and also protects steel and concrete from the elements.
Using LUMIFLON™ based coatings keeps repainting and cleaning costs down. Recently Asahi Glass has developed solvent-free LUMIFLON™ emulsions and powder grades. LUMIFLON™ is used in architecture, on vehicles and on chemical equipment.

ASAHI GUARD® protects textiles and fabrics against water, oil and dirt without changing their texture, colour or breathability.
Made of a special fluororesin coating agent, ASAHI GUARD® has very low surface tension, which ensures that oils, stains and water bead, rather than soak into the material. ASAHI GUARD® can be applied to all kinds of materials such as fabrics, paper, leather, carpet and many others. ASAHI GUARD® is also used in food packaging such as food-wrapping materials, containers, trays and greaseproof paper. It protects upholstery, carpets, seats and linen, as well as umbrellas, hats, gloves, ties, handbags, luggage, shoes, sportswear, uniforms and surgical gowns. ASAHI GUARD® is a top choice for heavy-duty water repellency on filters, partitions and tents.

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High tech products in every day applications

Silica Gel is a high-grade desiccant, which consists of SiO_2. It is chemically stable, insoluble in water, non-corrosive, odourless, tasteless and non-toxic. Four of our products, Hishi beads, Hishi pearls, S-Gel and Powder Gel are categorised by their particle sizes and forms. Silica Gel is widely used in food and industrial applications because of its high absorption capacity and safety. Typical examples are as desiccant packs in packaging of dried food, snacks, electronic devices, medical drugs and chemicals. In industry it is used as a dehumidifier or catalyst support for chemical processes.

FINE SILICA

Micro-sphere fine silica, ***SUNSPHERE***, is used worldwide in make-up and toiletries in the personal hygiene industry. It is also used as a filler in industrial applications in resins and coatings. Spherical microporous silica, ***MS GEL***, is used in high performance liquid chromotography packing to separate substances in pharmaceutical, agrochemical, biochemical and organic synthesis applications. It can also be used to refine solvents for the electronics industry.

Another fine silica product, ***SUNLOVELY***, consists of synthetic silica gel processed hydrothermically. It is also used in cosmetics, fragrances, drugs, ceramics and coatings.

AGC

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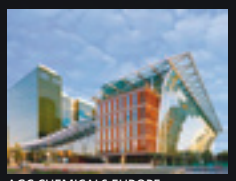
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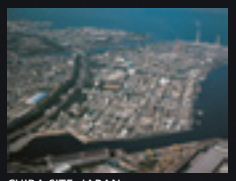
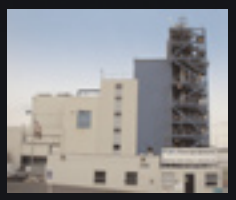

CHIBA SITE, JAPAN


FLUON®, ETFE & PFA PLANT, CHIBA


KASHIMA SITE, JAPAN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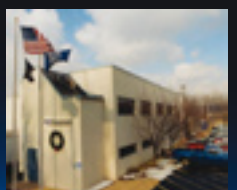
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