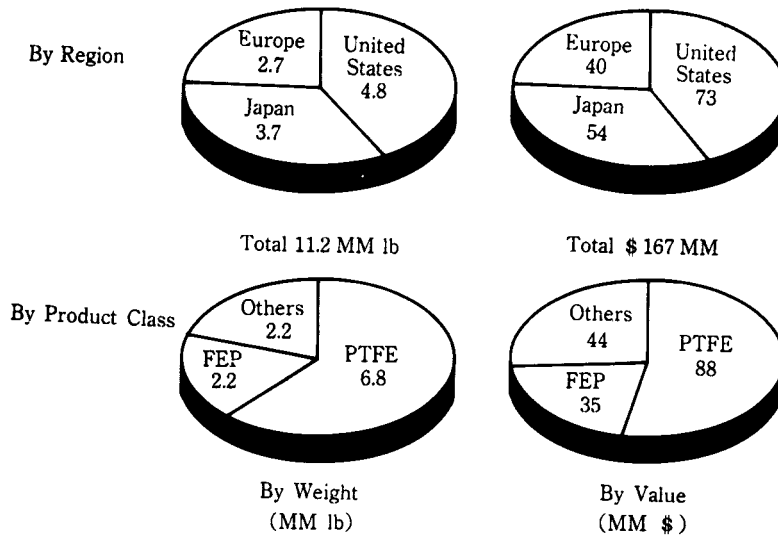
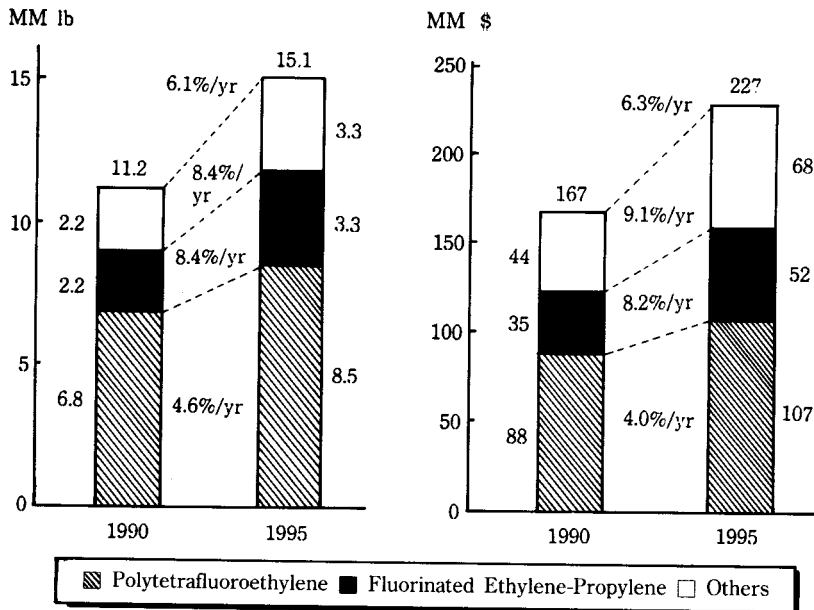


Fluoropolymer Films

■ 1990년 기준 Fluoropolymer Film의 지역별, 제품별 시장규모



■ 1990~1995 Fluoropolymer Film의 세계시장 규모



Note : All dollar values are in 1990 dollars

■ Fluoropolymer Resin과 Film 생산업체

Supplier	PTFE	FEP	PFA	ETFE	ECTFE	PCTFE	PVF	PVDF
A. D. Tech	C							C
Airtech International	F,C							
Allied-Signal					F	F		
American Durafilm	C	C	C	C				
Atochem(Elf Aquitaine)						R		R,F
Atomergic Chemetals								F
Ausimont(Montedison)	R	R		R	R	R		R
Chemical Fabrics	F,C	F,C	F,C					
Daikin Industries	R	R	R	R		R		R
DeWal Industries	C							
Du Pont	R,F	R,F	R,F	R,F		F	F	
Furon	F,C	F,C	F,C					
Hoechst Celanese	R		R	R				
ICI	R	R						
Norton(Saint-Gobain)	F,C	F,C			F,C			F,C
Solvay								R,F
3M						R,F		
Westlake Plastics					F			F

C = Converted film, F = Film, R = Resin

■ Polytetrafluoroethylene, Fluorinated Ethylene-Propylene 및 Perfluoroalkoxy Films의 응용분야

Application	PTFE	FEP	PFA
Electrical/Electronic			
Hookup wire coaxial cable tapes and jackets	C	C	
Interconnecting wires	C		
Computer cables	C		
Electrical tapes	C		
Spaghetti tubing	C		
Oil well logging cables		C	
Wires and cables		C	
Radomes		C	
Flexible printed circuits		C	E
Flat cable substrates		C	E
Plenum cables		C	
Solar collectors		C	
Standoff insulator			E
Bushings			E
Connector inserts			E
Heat-shrinkable wire and coaxial cable jackets			E
Composite Fabrication			
Release and bagging films	C	C	
Chemical Process Equipment Lining			
Valves		C	C
Pipes		C	C
Tanks		C	C
Heat exchangers		C	C
Expansion joints		C	
Packaging Bags			
Toxic waste bags	C		
Biological sampling and storage bags	C		
Food processing			
Conveyor belts		C	

C = Current application, E = Emerging or potential application

■ Ethylene-Tetrafluoroethylene, Ethylene-Chlorotrifluoroethylene 및 Polychlorotrifluoroethylene Film의 응용분야

Application	ETFE	ECTFE	PCTFEE
Electrical/Electronic			
Wire and cable	C	C	
Instrument membranes	E		
Radar and microwave windows	E		
Electrical tape		E	
Flat cable and capacitor insulation		E	
Fuel cell diaphragms		E	
Composite Fabrication			
Release films		E	
Chemical Process Equipment Lining			
Vessel lining	E		
Pumps and valves	C	C	
Packaging			
Liquid oxygen tank fittings		E	
Pharmaceuticals		E	
Military equipment		E	
Aircraft			
Cabin materials	E		
Electroluminescent interior lighting		C	

C=Current application, E=Emerging or potential application

■ Polyvinyl Fluoride와 Polyvinylidene Fluoride Films의 응용분야

Application	PVF	PVDF
Aircraft		
Laminates for interior panels	C	
Construction		
Architectural facing	C	C
Automotive		
Exterior automobile and truck surface	C	
Electrical/Electronic		
Epoxy circuit boards	C	
Multilayer boards	C	
Plenum cable jackets		E
Heat-shrinkable cable		E
Aircraft hookup wire		E
Chemical Process Equipment Lining		
Storage tanks		C
Valves		C
Scrubbers		C
Reactors		C
Heat exchangers		C
Semiconductor processing equipment		C
Pharmaceutical processing equipment		C
Consumer Apparel		
Breathable, waterproof fabric for sports apparel		E
Piezoelectric Sensors and Control Devices		
Orthopedic motion control system		E
Medical device switches and monitors		E
Medical ultrasound devices		E
Heat-activated light switches		E
Tactile robot sensors		E
Wide-area sonar devices		E
Fluid flow meters		E
Respiration monitors		E
Transducers		E
Audio amplifiers		E

C=Current application, E=Emerging or potential application

(Markets and Applications for High-Performance Plastic Films, 1992)

<경희대학교 화학공학과 김 성수>