



Structure and application of composite containers

Examples of flexible containers

Note: The double slash “//” means lamination with an adhesive or adhesive resin.

Film application

Manufacturing process	Layer structure (Outermost↔Innermost)	Characteristics	Application
Coextrusion by T-die, inflation or deflation technique	Nylon/Soarnol//EVA	Gas barrier, Transparency Tear resistance, Pierce resistance,	Fresh meat
	Nylon/Soarnol//Ionomer L-LDPE//Soarnol//EVA L-LDPE//Soarnol//L-LDPE PP//Soarnol//PP		Processed meat
Coextrusion and drawing	LPDE//Soarnol//LDPE EVA//Soarnol//Ionomer Soarnol/Nylon//Ionomer	Gas barrier, Transparency Deep drawability	Processed cheese
Coextrusion and coorientation	Nylon/Soarnol//L-LDPE	Gas barrier, Transparency Shrinkability, Tear resistance, Pierce resistance	Pickles, Snacks
	Nylon/Soarnol//EVA Nylon/Soarnol/Nylon		Processed fish
Coextrusion lamination	Nylon/Soarnol/Nylon//LDPE Ionomer//Soarnol//OPET	Gas barrier, Tear resistance, Pierce resistance	Skin pack
Coextrusion coating Laminating	Web//Soarnol//LDPE Web/LDPE//Soarnol//LDPE Web/LDPE//Soarnol//LDPE//Soarnol	Gas barrier, Flavor retention	Shrink pack

Bag-in-Box application

Manufacturing process	Layer structure (Outermost↔Innermost)	Characteristics	Application
Coextrusion by T-die or inflation technique	LDPE//Soarnol//LDPE L-LDPE//Soarnol//L-LDPE	Gas barrier, Flex-crack resistance	Wine, Soft drinks Spices, Developing solution



Examples of rigid containers

Note: The double slash “//” means lamination with an adhesive or adhesive resin.

Bottle application

Manufacturing Process	Layer structure (Outermost↔Innermost)	Characteristics	Application
Coextrusion blow molding	PP // Soarnol // PP HDPE // Soarnol // HDPE	Gas barrier, Oil resistance Rigidity	Ketchup, Mayonnaise Juice, Jam
	PC // Soarnol // PP	Gas barrier, Transparency Luster, Heat resistance, Rigidity	Marmalade, Dressing Baby food
	Soarnol // HDPE	Gas barrier, Luster, Rigidity	
	LDPE // Soarnol // LDPE	Gas barrier, Squeezable	Mayonnaise
	PET // Soarnol // PET	Gas barrier, Transparency, Luster, Rigidity	Carbonated drink
	HDPE // Soarnol	Oil and solvent resistance, Rigidity	Agricultural and industrial chemicals
	HDPE // Soarnol // HDPE	Oil and solvent resistance, Rigidity	Agricultural and industrial chemicals, Gasoline

Cup, Tray application

Manufacturing Process	Layer structure (Outermost↔Innermost)	Characteristics	Application
Coextrusion sheet forming and vacuum forming	PP // Soarnol // PP HDPE // Soarnol // HDPE HDPE // Soarnol // HDPE // Soarnol PS // Soarnol // LDPE PET // Soarnol // PP	Gas barrier, Flavor retention, Rigidity	Fresh meat, Processed meat, Cheese, Raw fish, Ketchup, Jam Precooked food, Pudding, Jelly, Cream, Yogurt, Chocolate cake, Dressing

Tube application

Manufacturing Process	Layer structure (Outermost↔Innermost)	Characteristics	Application
Multilayer tube coextrusion	LDPE // Soarnol // LDPE L-LDPE // Soarnol // L-LDPE	Flavor retention, Squeezable Organic solvent resistance	Spices, Cosmetics, Pharmaceutical, Tooth-paste, Toner, Engine oil

Carton application

Manufacturing Process	Layer structure (Outermost↔Innermost)	Characteristics	Application
Extrusion coating or coextrusion coating	Web // Soarnol // LDPE Web // Soarnol // LDPE // Soarnol	Gas barrier, Flavor retention, Oil resistance	Fresh juice