

Breakthrough Development in *Recyclable* High Barrier Film



Minimal Emissions
in production



Reduce waste
in Landfill



Brand Enhancement



Easier to Recycle

Toppan now offers a *Mono-Material* structure consisting of a Transparent base layer (PP or PE), an inorganic vapor deposition layer and a patented barrier coat layer.

Making this not only a recyclable transparent high barrier film, but also offering the world's highest level barrier performance and outstanding properties.

TOPPAN



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GL Transparent High Barrier Films

For Mono-Material Applications

TOPPAN

GL FILM consists of a base film (BOPP or HDPE), an inorganic vapor deposition layer and a barrier coating layer.

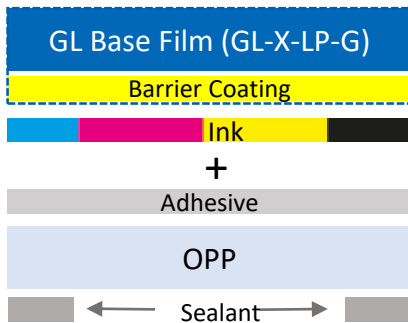


Suitable for packaging containing dry ingredients.

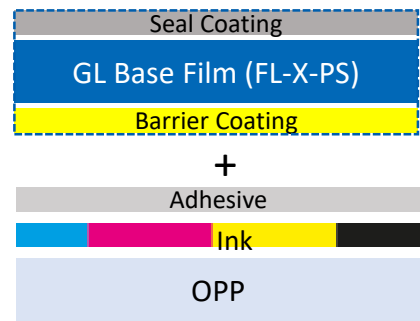
Grade	Base Film	O ₂ TR cc/m ² • day • atm	Condition	WVTR g/m ² • day	Condition
GL-X-LP-G	BOPP – 17μ Vapor Deposition Coating	1.0	30°C, 70% RH	0.2	40°C, 90% RH
GL-X-LE	HDPE – 25μ Vapor Deposition Coating	1.0	30°C, 70% RH	1.0	40°C, 90% RH
FL-X-P	BOPP – 20μ Coating only	3.0	30°C, 70% RH	2.5	40°C, 90% RH
		1.5	23°C, 0% RH	2.5	40°C, 90% RH
FL-X-PS	BOPP – 20μ Coating only and Heat-Sealable	3.0	30°C, 70% RH	2.5	40°C, 90% RH
		1.5	23°C, 0% RH	2.5	40°C, 90% RH

Mono-Material Structure Example

Mono-PP example 1:



Mono-PP example 2:



Target Applications for Dry Content

