



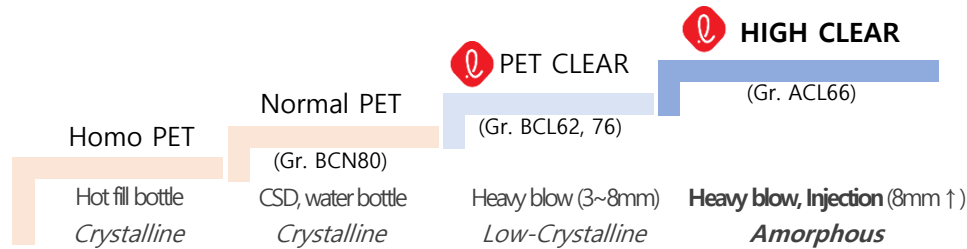
HIGH CLEAR

JUL. 2026



Overview

HIGH CLEAR is an amorphous polyester product that improves transparency by adjusting the chemical structure of PET. It enables the production of thick containers—previously difficult to manufacture with conventional PET due to reduced clarity—without haze.



Key Features

Enhanced Transparency

Glass-like clarity even in thick containers (8mm or more)

Maintains transparency in 10mm injection-molded specimens (diameter 7.4mm)



Improved Processability

Processes at lower temp. than PET and PETG; suitable for ISBM/Injection

Twice the flow length compared to PETG under identical conditions (Spiral flow test, mm)

ACL66	PETG	ACL66	PETG	ACL66	PETG
300	150	331	187	464	216
230°C, 45bar		230°C, 55bar		240°C, 55bar	

Excellent Chemical Resistance

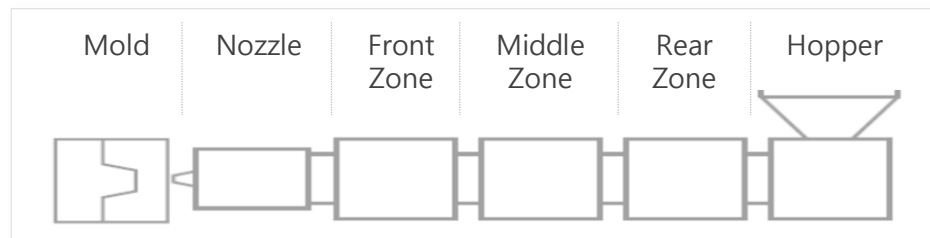
Achieves equivalent performance to PETG in tests with alcohol (Ethanol, 25°C, 72h), fragrance (Limonene, 50°C, 72h), oil (Mineral oil, 25°C, 72h)

Typical Properties

Specification			
Items	Method	Unit	ACL66
Intrinsic Viscosity	ASTM D4603	dl/g	0.66 ± 0.02
Color	ASTM D6290	-	Min. 57
		-	Max. - 2.5
Melting Point	ASTM D3418	°C	Not detected
Density	ISO 12154	g/cm ³	1.33
Chip Size	LCC METHOD	g/100ea	1.5±0.2
Pellet Shape	-	-	Cylindrical
Physical Property			
Items	Method	Unit	ACL66
Mold Shrinkage	ASTM D955	%	0.3~0.5
Tensile Strength	ASTM D638	kgf/cm ²	660
Flexural Strength	ASTM D790	kgf/cm ²	990
Izod Impact Strength (Notched, 23°C, 3T)	ASTM D256	kgf·cm/cm	3
HDT (18.5kgf)	-	°C	63

* The above physical property values are for reference only and do not represent product specifications.

Injection Conditions



항목		단위	조건
Drying Conditions			
Drying Temperature		℃	60~65
Drying Time		Hours	6~8
Injection Conditions			
Nozzle temperature		℃	220 ~ 250
Barrel	Front Zone		220 ~ 250
	Middle Zone		210 ~ 240
	Rear Zone		180 ~ 230
Hopper temperature			60 ~ 65
Mold temperature			10 ~ 50

* The above parameters should be adjusted depending on the type of machine and mold used.

 **Safety** *Analysis Institution: SGS Korea

Safety compliant with domestic and international food packaging standards

[USA] Passed migration testing according to standards (FDA 21 CFR 177.1630)

[EU] Passed migration testing according to standards (Regulation No 10/2011)

Free of PFAS (Regulation No.2025/40 PPWR)

RoHS

Passed RoHS II (Cd, Cr6+, Pb, Hg, PBB, PBDE (6 Restricted Substances))

Other Chemicals

BPA Free (Not detected)

Phthalate-free (Not detected)

MISSION

사랑과 신뢰를 받는
제품과 서비스를 제공하여
인류의 풍요로운 삶에 기여한다

We enrich people's lives by providing
Superior products and services that
Our customers love trust

