

ELASTOFLEX® AW65 AND AW50

ANTI WARPAGE



Innovation Polymix

**PLASTIC
COMPOUND
MANUFACTURER**

ISO 9001



Elastoflex® AW65 and AW50 are anti warpage masterbatch. They are designed for improving the dimensional stability and reducing warpage of the olefin product. These materials can be used in the semi crystalline polyolefin.

Table 1: Properties of Elastoflex® AW65 and AW50

Physical Properties	Test Method	Unit	Elastoflex® AW65	Elastoflex® AW50
Melt Flow Rate (190°C/2.16kg)	ASTM D1238	g / 10 min	7.0	0.30
Density	ASTM D792	g / cm ³	1.70	1.40

Elastoflex® AW65 and AW50 grades provide :

- ▶ Reduce percent shrinkage
- ▶ Reduce warpage
- ▶ FDA approval
- ▶ Recommended dosage is 5-10 %wt
- ▶ Provides excellent flexural modulus and shrinkage properties while maintain tensile strength

Application :

- ▶ Injection parts such as cap, basket and plastic container and etc.
- ▶ Extrusion and thermoforming parts such as luggage tray and etc.



Fig 1: Finished product without AW50



Fig 2 : Finished product with AW50

Table 2: Effect of Elastoflex® AW65 on mechanical properties of HDPE

Properties	Test method	HDPE	HDPE/AW65 5%	HDPE/AW65 10%	units
Melt Flow Rate (190° C,2.16kg)	ASTM D1238	13	12	12	g / 10 min
Density	ASTM D792	0.94	0.96	0.98	g / cm ³
Tensile strength at yield	ASTM D638	21	21	20	MPa
Tensile modulus	ASTM D638	670	740	710	MPa
Flexural modulus	ASTM D790	550	610	630	MPa
Notched izod impact strength at 23°C	ASTM D256	3.4	3.2	3.1	KJ / m ²
Shrinkage from mold (Thickness)	-	4.5	3.6	2.5	%

AW65 dosage 5% and 10% can reduce 20% and 40% shrinkage of HDPE respectively (From table 2)

Innovation Polymix Limited

20 Soi Ramkhamhaeng 30 (Ban Rao), Hua Mak, Bang Kapi, Bangkok 10240, Thailand
Tel: (66) 2 3755197 Ext. 263 Fax: (66) 2 3746503 www.elastomer-polymer.com

Innovation | **Polymer Mall**
Polymer technology solution provider