



Hanwha Compound  
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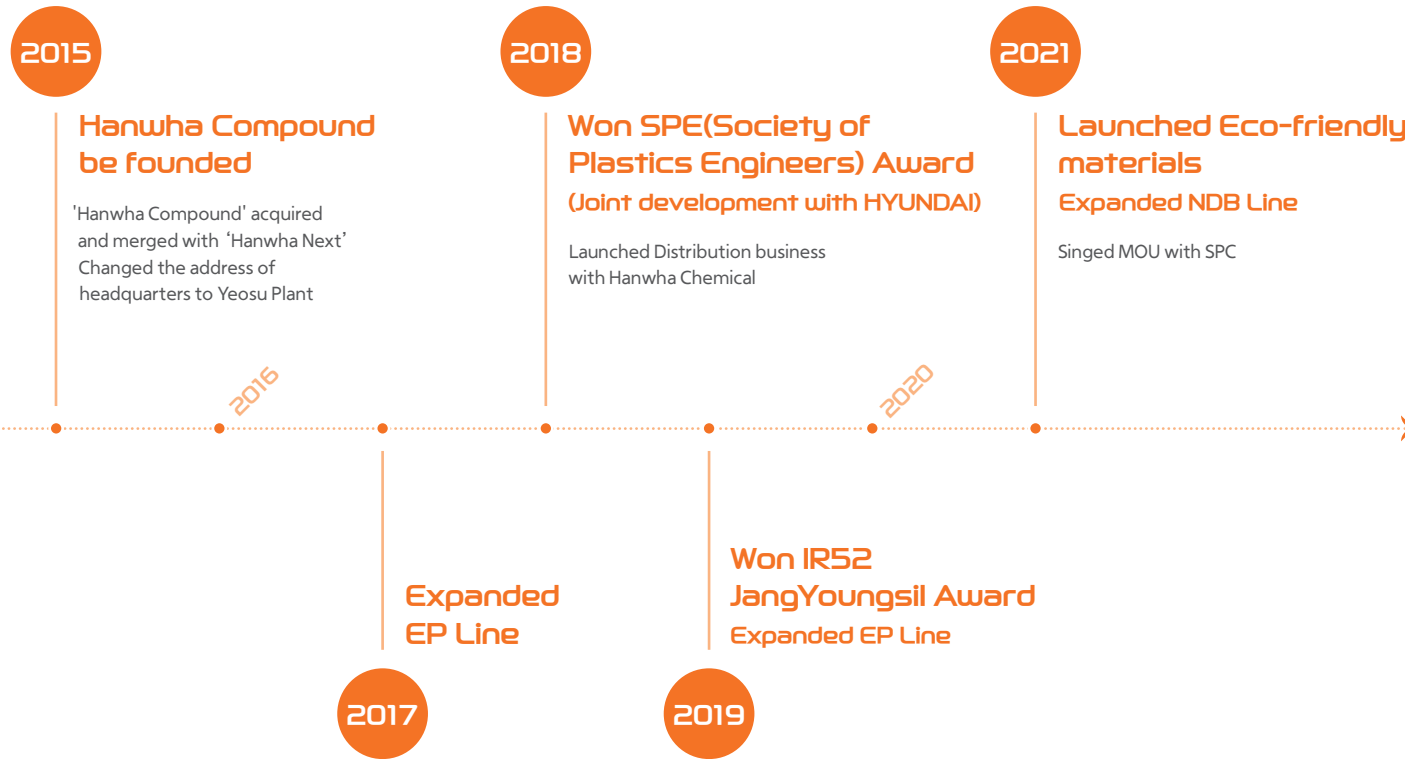
# H-ecot+

## Hanwha ecoplus

PLA Compound



## History



## TDS

HBD-111 & 131TR						HBD-212				HBD-321				
	TEST METHOD	UNIT	CONDITION		VALUE		TEST METHOD	UNIT	CONDITION	VALUE	TEST METHOD	UNIT	CONDITION	VALUE
PROPERTIES			111	131TR	111	131TR								
DENSITY	ISO 1183	-			1.47	1.24	ISO 1183	-		1.23	ISO 1183	-		1.27
MELT INDEX	ISO 1133	g/10min	190°C/5kg	190°C/2.16kg	10	4	ISO 1133	g/10min	190°C/2.16kg	25	ISO 1133	g/10min	190°C/5kg	1
<b>MECHANICAL PROPERTIES</b>														
TENSILE STRENGTH	ISO 527	kgf/cm <sup>2</sup>		Dry	420	640	ISO 527	kgf/cm <sup>2</sup>	Dry	250	ISO 527	kgf/cm <sup>2</sup>	Dry	270
TENSILE ELONGATION	ISO 527	%		Dry	13	2	ISO 527	%	Dry	765	ISO 527	%	Dry	325
FLEXURAL STRENGTH	ISO 178	kgf/cm <sup>2</sup>		Dry	730	1,000					ISO 178	kgf/cm <sup>2</sup>	Dry	440
FLEXURAL MODULUS	ISO 178	kgf/cm <sup>2</sup>		Dry	38,800	34,700					ISO 178	kgf/cm <sup>2</sup>	Dry	15,300
IZOD IMPACT STRENGTH	ISO 180	kJ/m <sup>2</sup>		Dry	4.2	3.8					ISO 180	kJ/m <sup>2</sup>	Dry	N.B
HARDNESS							ISO 868	Shore D	Dry	43	ISO 868	Shore D	Dry	70
<b>PROCESSING CONDITION</b>														
NOZZLE TEMPERATURE RANGE		°C			170 - 185							°C		175 - 185
DIES TEMPERATURE RANGE		°C				170 - 200		°C		180 - 190				
CYLINDER TEMPERATURE RANGE		°C			150 - 170	160 - 190		°C		160 - 180		°C		165 - 180
APPLICATION			Injection (111) Blown (131TR)					Injection					Blow	

## Product HBD

### The Best Eco-Friendly Material

- Bioplastic based on PLA
- Compared to normal plastic, HBD helps to relieve gas during processing

### Optimal PLA Compound

- HBD is more helpful for easily processing your products than conventional PLA compound

### Suitable Product For Improving Sustainability

- Compared to normal plastic, HBD is the best Eco-friendly compound biodegraded by microorganisms
- HBD takes great consideration of the environment

## Application



### Injection Disposables

- Spoon · Forks · Chopsticks
- Bowl
- Straw



### Blow Disposable Container

- Drinking Bottle
- Cosmetic Container
- Cup



### Blown Plastic Film

- Food Packaging
- Mulch Films
- Cling Film

