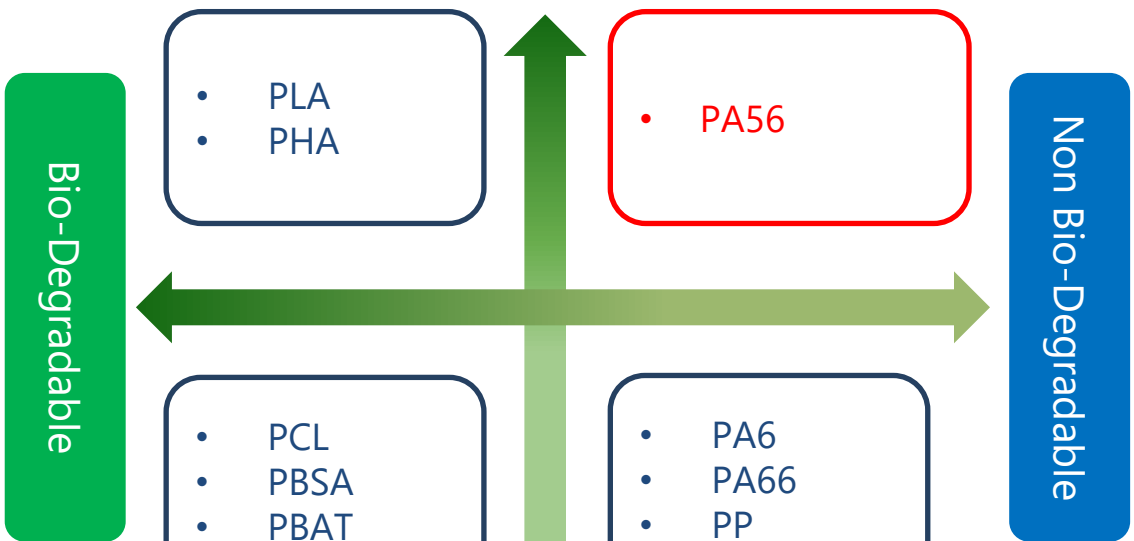


PA56——Bio based Material

Brief Introduction

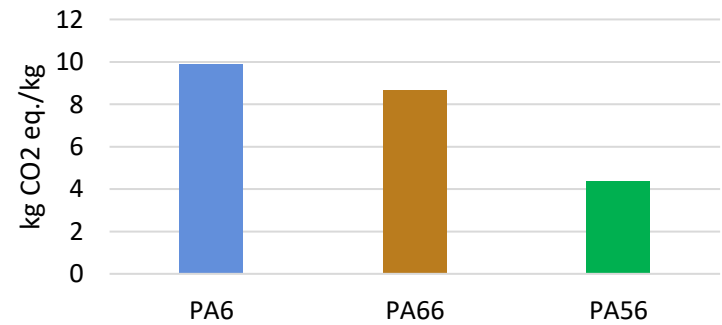
Category

Bio-Based
(corn, castor, sugar pipe)



	Bio-based Carbon Content
PA56	$\frac{5}{5+6} = 45\%$

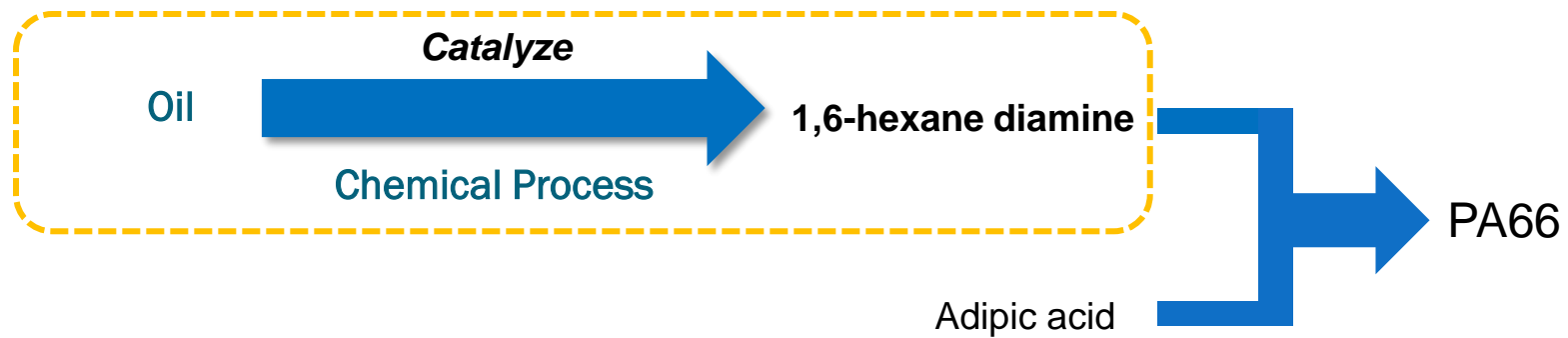
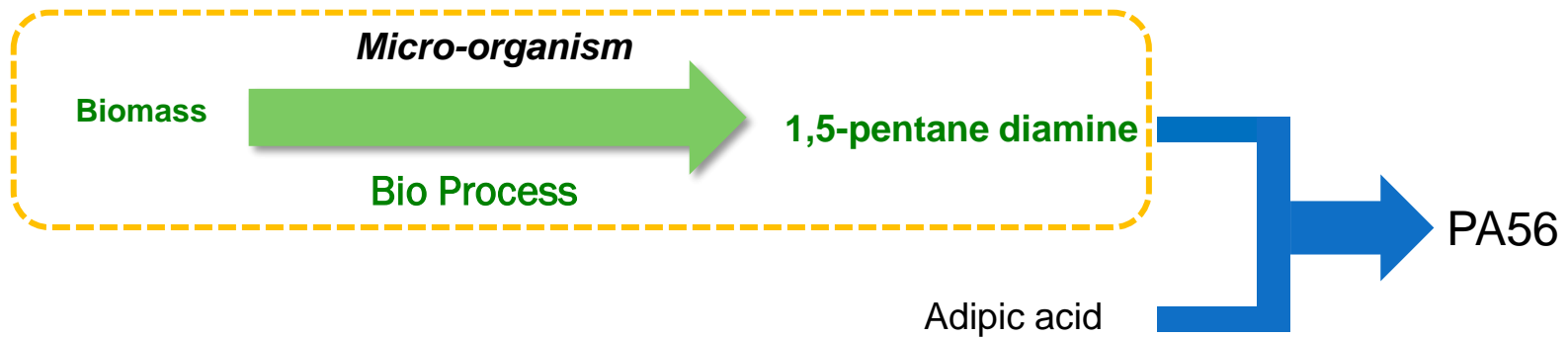
Global Warming Potential



Fossil-Based
(Oil Resources)



Synthetic method



Material Properties

Properties	Test Standards	S.I. Units	Typical Value (d.a.m)	
			PA66	PA56
Tensile Strength	ISO 527-2	Mpa	82	81
Tensile Modulus	ISO 527-2	Mpa	3100	2800
Flexural Modulus	ISO 178	Mpa	2800	2700
Impact Strength, IZOD notched	ISO 180	KJ/m ²	6	5
Density	ISO 1183	g/cm ³	1.14	1.13
Flammability	UL 94	/	V-2	V-2

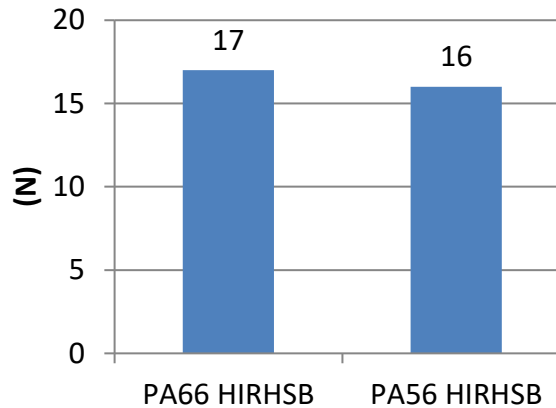
- Similar performance

Product Testing

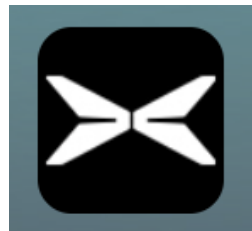
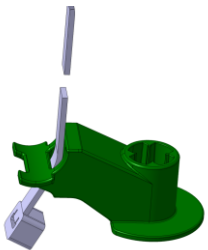
PA56 HIRHS for Clips

- OEM: Xiaopeng (China NEV)
- Volume: 100K/Y
- Application: M6 screw fixing
- Sales amount: 60K CNY/y
- OEM SOP: Dec.2023
- Current Status: Mass Production in HT CN

FTOVAL Insertion Force



FTOVAL Pull-out Force



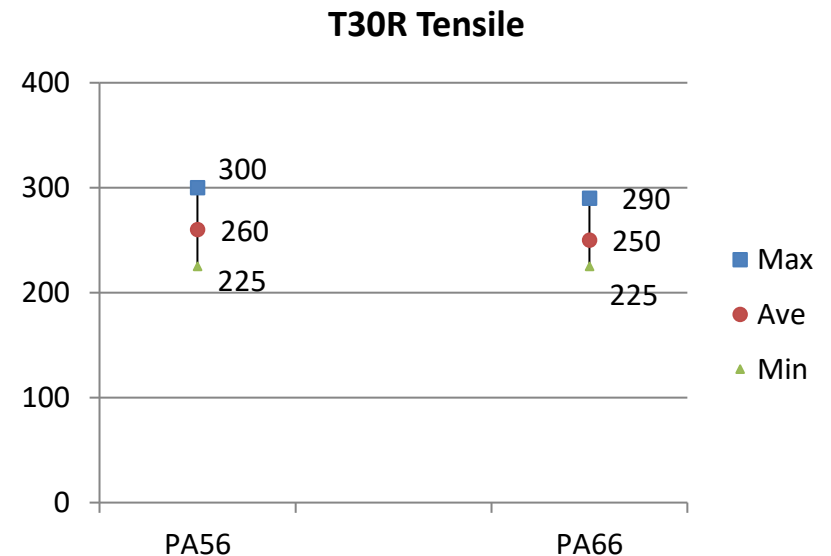
Product Testing

PA56 HS for Cable Ties

Injection

T30R (100 cav.)	PA56	PA66
Supplier	KingFa	Dupont
Brand Name	PA56-C112	103FHS
Barrel Temp. (°C)	315	315
Injection Pressure (kgf)	1500	1600
Cycle Time (sec.)	12	12

Performance



Thanks