Qingdao Haide Packaging Co., Ltd.
Product Specification and Testing report

Standard:Q/0282 HD002-2018（Pouch） F-HD8.2.4-05

Product ID	A215-02	Product Name	Sweet corn cob retort pouch	Structure	PET13/BOPA15/CPP70
Order #	S-1809092	Size L*W	330*130mm	Order issue date	2018.11.2
Testing Samples	20 pcs	Final quantity	800,000 pcs	Testing date	2018.11.18

Type	Item		Standard	Test result
Outlook	Crease		No lamination Crease	Pass
	Lamination bubble		No obvious bubble	Pass
	Sealing area		Flat,no Virtual sealing, no bubble	Pass
	Delamination		No	Pass
Printing (gravure)	Registration deviation		Major part： ≤0.20 mm edge part： ≤0.35 mm	0.10 / 0.27
	Chromatic aberration CIE L*a*b*		≤2.8	1.6
	Bar code grade		≥1.5	2.2
Size deviation	Length		±3 mm	0.2-1.4
	Width		±3 mm	0.2-1.8
	Average thickness by		±8%	4
	Sealing width by		±20%	7
	Sealing edge deviation		≤3 mm	1.1
Physical Strength	Peeling strength N/15mm	Normal	≥1.2 N	——
		Improved	≥2.0 N	——
		Retort	≥3.5 N	5.58
		Retort high	≥4.5 N	——
	Sealing Strength N/15mm	Normal	≥10 N	——
		Improved	≥20 N	——
		Retort	≥30 N	49.6
		Retort high	≥40 N	——
	Pulling broke Strength (Longitudinal/horizontal)		≥20 N	L：73.5/H：86.2
	Impact test		≥0.6 J	2.8
	Pressure test		3 minutes GBT1871	Pass
	Falling test		Water 70% sealed, 1.5 meter falling 3	Pass
Residual Solvent	Total solvent		≤10 mg/m2	1.3
	Aromatic hydrocarbon		≤0.5 mg/m2	0
Barrier	OTR		≤0.5 ml/m2.0.1MPa	0.24
	WVTR		≤0.5 g/m2.0.1MPa	0.22

Proved by：Alan SUN Tested by：Peipei TANG global@haidecorp.com