

ALU-ALU Spec Sheet

CONVERTING TECHNICAL SECTION
2014.6.2

Material Specification

1.Product : ALU-ALU (Pharmaceutical Packaging)

2.Material Composition

Item		Unit	Specification	Tolerences(+/-)	
Raw Material	Nylon	Thickness	μm	25	5%
		Weight	GSM	29	
	Al-foil	Thickness	μm	50	8%
		Weight	GSM	135.5	
	PVC	Thickness	μm	60	10%
		Weight	GSM	81	
	Total Thickness		μm	140	8%

3. Physical Properties

		Unit	Specification	Remark
Bonding Strength	Nylon/AL	gf/15mm	650 ↑	
	AL/PVC	gf/15mm	650 ↑	
Erichsen		mm	9mm ↑	
Forming Test	Normal		No Cracking No Delami	• 9mm(LOTTE Cavity) • LOTTE Forming Test Machine
	Stability		No Delami	40°C 75%RH 2Days

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4. Appearance

- Scratch, Dent on Nylon : No Detection
- Scratch, Dent on PVC : No Detection

5. General Properties

- High performance Cold-formable
- Good Resistance to low & high temperatures
- High Barrier to Light, Moisture, Oxygen
- Can be enhanced with flexographic or rotogravure printing

6. Reel Dimension

- 1) Reel Width : 60 ~ 800 mm, Tolerance ± 0.5 mm
- 2) Reel Length : Max. 2,050M
- 3) Core : I.D. 76mm Paper or Steel core
I.D. 152mm Steel core

7. Storage

12 months at 15 ~ 30°C, below 70% RH condition

(OPA film is moisture sensitive, which should be protected against moisture)

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8. Certification

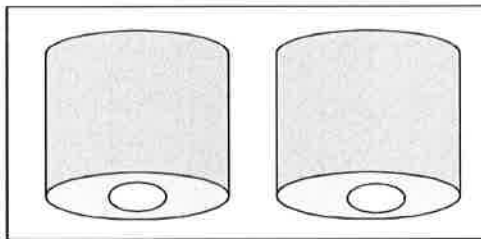
8.1 FDA 21 CFR 177.1950

- Product Identification : Alu-Alu
- Approved date : Oct. 27th, 2009

8.2 DMF Assigned No. 024365

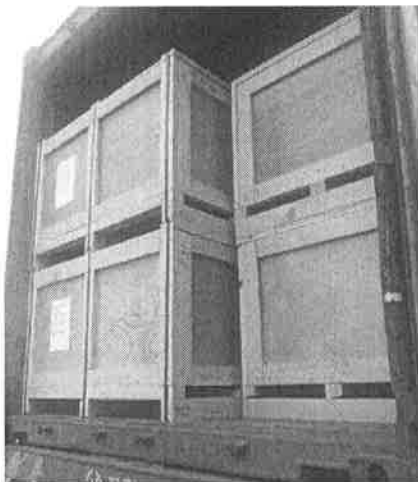
- Type III : Packaging material
- Subject : Container & closure as manufactured
in Gyeonggi-do Korea
- Submission date : Nov. 11th, 2010

9. Packaging



9.1 Wooden Box Type

- LLDPE Tube Packaging
- Both Side styrofoam Disk
- Put 2EA SILICA GEL
- 152φ Steel Core Hanging
- Fumigation Wooden Box
Packaging



9.2 Carton Box Type

- HDPE Tube Packaging
- Both Side Carton Disk
- Put 1EA SILICA GEL
- Wrapping packaging after box
packaging

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10. Quality Assurance

10.1 ALU-ALU is moisture sensitive, which should be protected against moisture.

(Below 70% of relative humidity)

10.2 The supplier should submit the inspection certificate of every purchase order.

The Number of purchase order will be mentioned in the inspection certificate.

10.3 The term of validity : 12 months from ex-work

(Storage Temperature : 15~30°C , Below 70% of relative humidity)

10.4 If buyer's forming test condition is different from

Lotte's forming test condition, Buyer shall discuss with


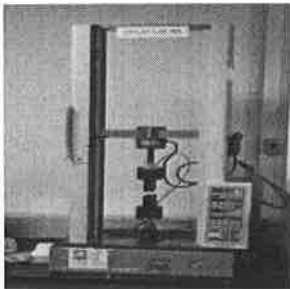
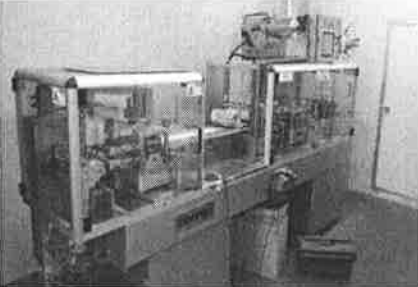
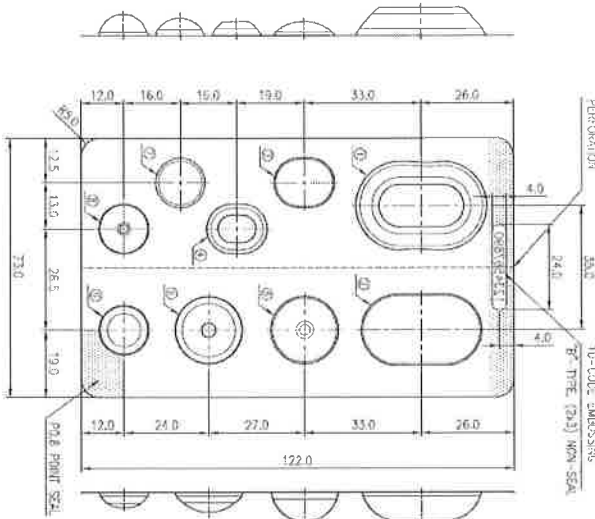
Lotte's technical team before using Lotte's material

10.5 If buyer's forming test condition is big difference

compared with Lotte's forming test condition, Lotte is

very hard to guarantee quality

LAB equipment(ALU-ALU)

Machine	Maker	Model	Application	Picture
Erichsen Test	Erichsen	202 EM	Deep Drawing Test for Al-foil & AluAlu	
Universal test machine	Toyoseki	VES10	ON/AL, AL/PVC Testing for Bonding strength	
Forming Machine	Hoonga	HM-V3	Checking for Forming and Crack	
Mold				<ul style="list-style-type: none"> - Type : Circle - Plug : Teflon - RPM : 26EA/Min - PTP Seal Temp : 150~190°C - Depth : 4.0mm ~ 9.0mm - Specification : No Cracking, No Delami -Quality is guaranteed under above conditions

Mold Drawing(Forming Test Machine)

