



革命性的高品質新產品  
A Revolutionary High Quality New Products.

DECO

# 南亞 A-PET 透明板

NAN YA A-PET TRANSPARENT SHEET



南亞塑膠工業股份有限公司  
NAN YA PLASTICS CORPORATION

# 南亞A-PET透明板 NAN YAA-PET TRANSPARENT SHEET

**南**亞塑膠公司除致力於新產品之開發外，為拓展國際市場，提高企業競爭力，不惜鉅資引進新設備，配合數十年之平板製造經驗，投資生產非結晶性聚脂（簡稱A-PET）透明板，產品品質更優於進口產品，進一步引領國產押出平板產業邁向新紀元。

南亞 A-PET 透明板係南亞公司累積了透明板與發泡板等產品優良之技術經驗，結合德國最新科技設備之結晶，產出之“高品質之非結晶性硬質押出平板”，產品具備優良的機械、熱與耐化學性，透明性佳，燃燒時不會產生任何有毒氣體，故具環保特性，同時亦為使用於食品方面之最安全材料，所以用途廣泛，舉凡各種加工、展示或陳列、真空型等用途，皆能得到最佳的效果，並增加產品之附加價值，為非常實用之塑膠板材。

In addition to devoting its energies to the development of new products, NAN YA PLASTICS, with its decades-long experience in the making of plane sheets, is investing significant funds on new equipment for high-quality A-PET transparent sheets in the hope of expanding its global market and upgrading its corporate competitiveness. As the quality of the new product has proven superior to that of foreign-made equivalents, this Taiwanese-made transparent sheet is leading the local extruded sheet industry well into a new era.

The Nan Ya A-PET Transparent sheet - the "high-quality amorphous rigid extrusion sheet" is supported by the rich experience the company enjoys in the making of transparent and foam sheets and the state-of-the-art technology introduced from Germany. The product boasts of optimal mechanical, thermal as well as chemical-resistant properties. Its full-burning feature creates no poisonous gases. As an environmental and safe material for use in the food industry, it is apt for a wide variety of machining works, displays or demonstrations, thermoforming as well as other purposes. The additional values of the product make it a practical plastic sheet.



▲ 具環保，加工性優良又強韌的南亞 A-PET 透明板

*Environmental Awareness, Excellent Fabrication & Extremely tough - Nan Ya A-PET Transparent Sheet.*

## ◆特性 / CHARACTERISTICS



### ■ 透明性佳

透明度可達87%以上，質感佳，適用於要求高透明度之製品。

### ■ 優異的耐衝擊強度及剛性

材質堅硬耐用，即使於低溫-40°C時物性亦佳；適於高耐衝擊強度之用途。

### ■ 加工性優良

可使用鋸、模切、鑽及雷射切割等加工方式，也可冷彎及熱彎、黏著、銲接和拋光，印刷和塗裝；且冷彎不白化，外觀亮麗。

### ■ 热成型性佳

不需預熱即可成型，精度高，收縮率約0.5%；深成型特性佳，不破裂且厚度均一。

### ■ 環保

可回收使用不污染環境。

### ■ 食品衛生性優

材質為PET，可符合所有主要之食品規定，如FDA或BGA等，適用於食品容器包裝等用途…

### ■ 耐油脂及耐化學性優

對於酸、鹼、油類等均不受侵蝕。

### ■ 低燃燒性

耐火性佳，不助燃，低發煙量，燃燒後無有害毒物。

### ■ HIGH TRANSPRENT

The 87% transparency gives the product a quality appearance and apt for use in products of high transparency.

### ■ HIGH IMPACT

Featuring high impact and durability, the product performs perfectly in low temperature of at -40°C; making it apt for high-impact applications.

### ■ EASY TO PROCESS MECHANICALLY

In addition to sawing, mold cutting, drilling and laser cutting among other conversion systems, cold and hot bending, gluing, welding, polishing, printing as well as painting are also available with outstanding performances. Cold bending produces no whitening, giving the product a bright appearance.

### ■ EXCELLENT THERMOFORMING PROPERTIES

The precision thermoforming property of the product requires no preheating, and its shrinkage rate goes at approximately 0.5%. The product boasts of sound deep-forming property as it does not break and delivers even thickness.

### ■ ENVIRONMENT AWARENESS

Recyclable and non-pollutant.

### ■ FOOD CONTACT

The PET material meets the major food regulations, such as FDA or BGA, apt for use in food packaging and other applications.

### ■ HIGH CHEMICAL RESISTANCE

Optimal resistance to acids, alkali and oils.

### ■ LOW FLAMMABILITY

Of optimal fire resistance and as a non-combustible, the product delivers minimum smoke and no toxic gases after burning.



## ◆ A-PET 應用 / APPLICATIONS



### ■ 標示，展示牌

商品展示架，型錄盒，標示牌，相框面板，銘板等。

### ■ POP, DISPLAY

Display shelves, catalogue holders, signboards, photo frame covers, and nameplates.

### ■ 雜加工品

食品用容器，機械加工，醫療用加工品，透明盒等。

### ■ PROCESSING PRODUCT

Food containers, machining, medical products and transparent cases among others.

### ■ 看板

室內用看板，各種印刷用途。

### ■ SIGNS

Indoor signs and a variety of printed materials.

## ◆產品規格 / PRODUCTS SPECIFICATIONS

厚度 (mm)	寬×長 (mm)	色相 Color
0.5	910 × 1820 (3' × 6')	透明 CLEAR
0.8		
1.0		
1.2		
1.5		
1.8		
2.0		

## ◆物性表 / PHYSICAL PROPERTIES

項目 Test Items	試驗方法 Test Methods	單位 Units	試驗值 Test Value
比重 Specific Gravity	ASTM D-792	-----	1.37
抗拉強度 Tensile Strength	ASTM D-638	kg/cm <sup>2</sup>	580
伸長率 Elongation at Yield	ASTM D-638 at 50 mm/min	%	4.5
拉伸彈性係數 Modulus of elasticity	ASTM 638	kg/cm <sup>2</sup>	13000
彎曲強度 Flexural strength	ASTM D790	kg/cm <sup>2</sup>	880
彎曲彈性係數 Flexural modulus	ASTM D790	kg/cm <sup>2</sup>	20000
熱變形溫度 Heat deflection temperature	ASTM D648	°C	65.5
IZOD 耐衝擊強度 Impact strength(+20°C)	ASTM D256	kg.cm/cm <sup>2</sup>	4.3
透光度 Light transmission(1 mm)	ASTM D1003	%	87

註：上述資料係試驗值，僅供客戶選擇參考，非品質標準亦不作任何商業證明使用。

Notes: The above data are test values for reference only not quality standards, not served as any commercial certification.

## ◆耐化學性質 / CHEMICAL RESISTANCE

化學品名	Chemical	耐化性 Solution resistance
醋酸	Acetic Acid ( 40% )	◎
丙酮	Acetone	○
硫酸鋁	Aluminum Sulphate	◎
氨水	Ammonia ( 10% )	○
戊基醋酸	Amyl Acetate	○
戊基乙醇	Amyl Alcohol	◎
苯	Benzene	△
安息酸	Benzoic Acid ( solid )	◎
苯甲基醋酸	Benzyl Acetate	△
苯甲基乙醇	Benzyl Alcohol	△
丁基醋酸	Butyl Acetate	△
丁基乙醇	Butyl Alcohol	◎
丁基硬脂酸	Butyl Stcarate	◎
四氯化碳	Carbon Tetrachloride	◎
檸檬酸	Citric Acid	◎
乙醇臘	Cetyl Alcohol	◎
氯仿	Chloroform	△
鄰苯二甲酸鹽	Di-alkyl Phthalate	◎
清潔劑	Detergents	◎
二乙基乙醇	2-Ethyl Ethanol	◎
乙基醋酸	Ethyl Acetate	△
甲醛	Formaldehyde ( 40% )	◎
蟻酸	Formic Acid ( 30% )	◎
香葉醇	Geraniol	◎
乙二醇	Glycol	◎
丙三醇	Glycerine	◎
氫溴酸	Hydrobromic Acid ( 50% )	◎
氫氯酸	Hydrochloide Acid ( 10% )	◎
氫氟酸	Hydrofluoric Acid ( 60% )	○
過氧化氫	Hydrogen peroxide	◎
異丙醇	Isopropyl Alcohol	◎
潤滑油	Lubricating Grease and Oils	◎
甲醇	Methyl alcohol	◎
礦物油	Mineral oil	○
石臘	Paraffin	◎
汽油	Petrol	◎
碳酸鈉	Sodium Carbonate	◎
氯化鈉	Sodium Chloride	◎
氫氧化鈉	Sodium Hydroxide	△
硫酸	Sulphuric Acid ( 30% dilute )	◎
甲苯	Toluene	◎
酒石酸	Trataric Acid	◎
二甲苯	Xylene	◎
氯化鋅	Zinc Chloride	◎

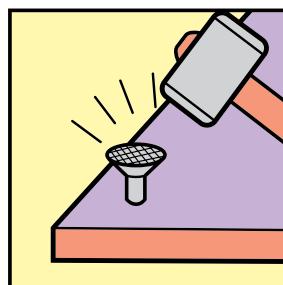
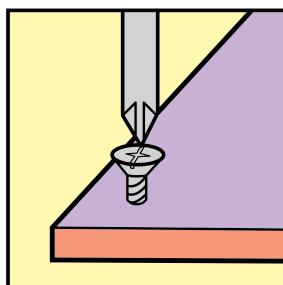
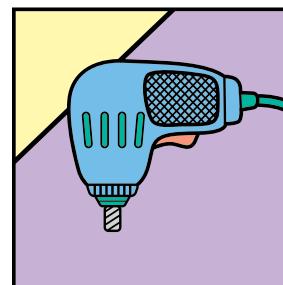
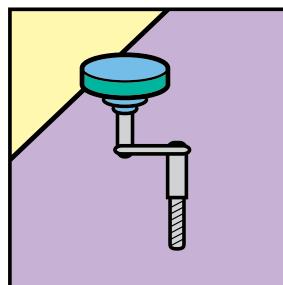
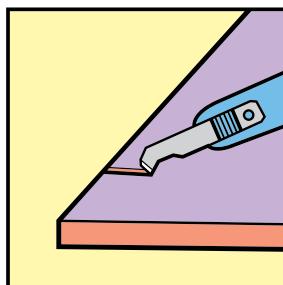
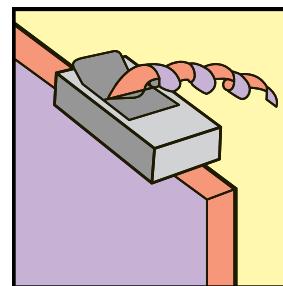
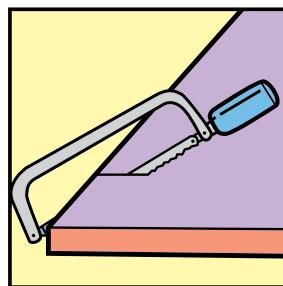
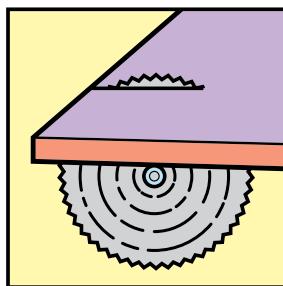
◎代表優 Completely non-erosive / ○代表可 Slightly erosive / △代表劣 Unusable

◆上表為測試數值，僅供參考用。/ Testing value of the above list for reference only.

## ◆加工法說明 / PROCESSING HINTS

**南**亞A-PET板之加工方式與壓克力及PVC塑膠板之加工方式幾近相同，亦適用其加工設備。

The Nan Ya A-PET sheet can be processed without difficulty using conventional tools. Here are some hints on the various methods of process.



### 鋸

一般使用速度快，粗齒之鋸片較合適，圓盤鋸之切削速度以4500rmp較佳；不過為避免板材熔融，速度應儘可能調高，並固定住板材以減少振動，使鋸的邊緣不致太粗糙。

其他裁切方法有刮刀，手鋸，帶鋸等工具，最佳裁切方法仍須視實際情況，來判斷裁切工具或方法，為提高工作效率之要件。

### Sawing

A high-speed-large-dent blade would be recommended. In case of a circular saw, the cutting speed should be set to 4500rpm. To keep the sheet from melting, the sawing rate would be suggested to keep as high as possible, while securing the sheet to keep it from shaking, and the edge should not be too rough. Other cutting methods are scraping, hand sawing and band sawing. An ideal tool or method would be determined by the work condition.

### 鑽孔及沖床加工

可使用普通之木工機械加工，例如桌上型鑽孔機，也可使用沖床沖孔，因A-PET透明板具耐沖擊性佳，故非常適合沖床加工；尤其是若將板加熱至40°C後，可得到更好的效果。

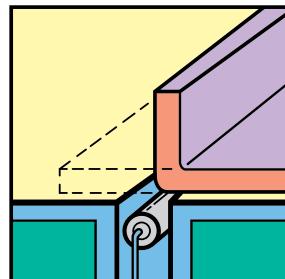
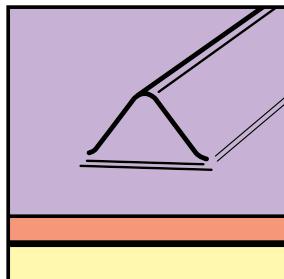
### Drilling and punching

Ordinary carpentry tools such as a tabletop drilling machine or a punching machine may be used. For optimal resistance to punching, the A-PET sheet is ideal for punching processes, particularly when the sheet is heated to 40°C.

## ■ 成型

A-PET 板深成型能力佳，厚度一致且不易破裂，收縮率低(0.5%)；理想之成型溫度為 130°C，其他塑膠板之成型模亦能適用之。

加熱到 150°C，板材即產生結晶，由透明轉而乳白不透明，即可成型為 C-PET，其耐熱性提高，耐化學性也提升。熱彎時，應於彎曲之處局部加熱至 110°C，即可得到較佳之效果，亦可於常溫下直接彎曲板材，彎曲處仍可維持透明而不白化。



## ■ Thermoforming

The A-PET sheet bears optimal deep forming capability; it comes in a uniform thickness and does not break easily. The shrinkage rate of 0.5% and the forming temperature of 130°C, it can be operated in forming molds for other plastic sheets.

When heated to 150°C, the sheet creates crystal that turns from transparent to opaque and creamy, ready to be made into the C-PET, which has improved heat resistance and chemical resistance.

In thermal bending, better results can be achieved by applying local heating of turns to 110°C. You can also bend the material in ambient temperature and it remains transparent and does not go whitened.

## ■ 印刷

印刷性佳，適用於現用之印刷方法，如網印等，亦可使用其他塑膠板用之油墨印刷，效果極佳。



## ■ Printing

The good printing performance makes it apt for modern printing applications, such as screen-printing and others. Ink printing available on other plastic sheets performs well too.



本簡介採用南亞珠光紙PH-150級

請勿混入一般紙類回收

This catalog is made by PEPA PH-150.

Do not recycle together with the natural paper .

(2004.12.1000)



**南亞塑膠工業股份有限公司**  
NAN YA PLASTICS CORPORATION

塑膠第三事業部 · PLASTICS 3rd DIV.

台北市 10591 敦化北路 201 號 電話 : (02) 27178226

201, TUN HWA N. ROAD, TAIPEI, TAIWAN, R.O.C.

CABLE : "NAN YA TAIPEI" TELEX : 11246 PLASTICORP TAIPEI

TEL : (02) 27178226 FAX : (02) 25140628, 25140668