

TAITA CHEMICAL COMPANY, LTD 台達化學工業股份有限公司

# 台達化工

EPS

TAITACELL®

EXPANDABLE POLYSTYRENE 發泡性聚苯乙烯



## PROPERTIES OF BEADS | 珠粒性質

GRADE 等及	PROPERTIES 性質	WATER CONTENT MAXIMUM % 最高水份含量%	MM	T	S	Ss	F	H
Bead Size Range 粒徑範圍			1.2 – 1.8 mm	1.0 – 1.4 mm	0.7 – 1.1 mm	0.7 – 0.9 mm	0.5 – 0.85 mm	0.3 – 0.5 mm
EPS-301	Expandability 發泡倍率	0.5	80 – 95	70 – 85	65 – 80	65 – 80	55 – 70	20 – 50
EPS-391			70 – 85	65 – 80	60 – 75	60 – 75	50 – 65	—
EPS-321 <sup>1</sup>			80 – 95	70 – 85	65 – 80	65 – 80	55 – 70	20 – 50
EPS-321L <sup>1</sup>			40 – 85	30 – 75 <sup>2</sup>	25 – 70 <sup>2</sup>	—	25 – 65	—
EPS-351			80 – 95	70 – 85	65 – 80	65 – 80	55 – 70	—
EPS-361			80 – 95	70 – 85	65 – 80	65 – 80	55 – 70	—

1. If an alternative bead size is required, please contact a Taita Chemical sales representative for more information.

2. High expandability with batch pre-expansion.

1. 如果要求的粒徑在範圍之外請連絡台達業代。

2. 若欲達到較高的發泡倍數，請使用批次預發泡

## PROPERTIES OF MOLDED FOAMS | 成型品性質

PROPERTIES 性質	TEST METHOD 試驗方式	UNIT 單位	MM	T	S	Ss	F	H
Density 密度	JIS K-7222	kg/m <sup>3</sup>	12 – 25	15 – 30	15 – 30	15 – 30	17 – 35	19 – 50
Compressive Strength Minimum (10% Deformation) 壓縮強度 (10%變形)	JIS K-7220	kg/cm <sup>2</sup>	0.7	0.8	0.8	0.8	0.8	0.9
Flexural Strength Minimum 抗折強度	JIS K-7221	kg/cm <sup>2</sup>	2.0	2.5	2.5	2.5	3.0	3.0
Thermal Conductivity 熱傳導率	JIS A-9511	kcal/m · h · °C	0.028~0.039	0.027~0.036	0.027~0.036	0.027~0.036	0.027~0.036	0.027~0.036

\*\*The data listed represents average values that are believed to be reliable. They are given for information purposes only, with no guarantee of their accuracy. The product is sold without warranty, express or implied, upon the condition that purchasers shall make their own tests to determine the suitability of the product for their particular purposes.

\*\*以上數據為實驗室測試結果，僅供參考用。

## INTERNATIONAL COMPLIANCE | 國際認證



Flammability Rate HF-1 (EPS321)  
File No. E50263



CFR Title 21, Pt 177.1640



International  
Organization for  
Standardization

ISO 9001, ISO 14001,  
OHSAS 18001



SONY Green  
Partnership Certification



RoHS directive  
REACH\*

\*except EPS321



# TAITACELL® EPS | 發泡性聚苯乙烯

In 1967, Taita Chemical Company, Limited was the first company in Taiwan to produce Expandable Polystyrene. Expandable polystyrene is synthesized through suspension polymerization to form resin beads. Through years of perfecting its technology, Taitacell® EPS has achieved one of the best compressive strengths in Asia and is a well-recognized brand worldwide.

## CHARACTERISTICS

1. Wide range of processability
2. Good strength
3. Short cycle time
4. Low production cost
5. Low steam consumption

## APPLICATIONS

Packaging for fragile items and electronics, thermally-insulated fish and cake boxes, construction insulation, exhibition displays, arts and craft materials, boogie boards, helmet inner mat

台達化工於1967年在台灣率先設立發泡級聚苯乙烯(EPS)工廠，以苯乙烯為原料採用懸浮聚合法生產發泡級聚苯乙烯。台達化工經過多年的製程改良及技術提升，EPS產品具有優越的特性，使得Taitacell® EPS 成為世界知名EPS品牌之一，其成品耐壓強度深獲世界各地好評。台達化工亦致力於產品的改善與新產品等級的研製，以滿足客戶的需求。

## 特性

1. 加工成型時之適用溫度範圍較廣
2. 強度良好
3. 生產週期短
4. 製造成本低
5. 蒸氣消耗量少，節省能源

## 應用

易碎物品與電子產品之包裝、魚箱和蛋糕盒、建築保溫、展覽展示、藝術和工藝材料、衝浪板、頭盔內墊





# GENERAL PURPOSE GRADE EPS-301

## 一般級 EPS-301

CHARACTERISTICS 特性	APPLICATIONS 應用
<ol style="list-style-type: none"> <li>1. Can be processed over a wide range of molding conditions</li> <li>2. Good strength</li> <li>3. Low production cost</li> <li>4. Low steam consumption</li> <li>5. Suitable for block case molding (packaging for electronics)</li> </ol> <ol style="list-style-type: none"> <li>1. 加工成型時之適用溫度範圍較廣</li> <li>2. 強度良好</li> <li>3. 制造成本低</li> <li>4. 蒸氣消耗量少，節省能源</li> <li>5. 適用於各種包裝盒及大板成型 (尤其是輕型電子產品之包裝)</li> </ol>	<ol style="list-style-type: none"> <li>1. Lost Foam Casting (LFC)</li> <li>2. Protecting articles from breakage, e.g. packaging for electronics and electrical appliances, chinaware and glassware etc.</li> <li>3. Thermal insulation, e.g. packaging for frozen foods, insulation tubes and plates etc.</li> <li>4. Food packaging, e.g. fish, fruit and vegetable boxes</li> <li>5. Construction materials</li> <li>6. Others, e.g. arts and crafts materials and helmet inner mat etc.</li> </ol> <ol style="list-style-type: none"> <li>1. 消失模</li> <li>2. 保護物品避免破裂震壞，如電子產品、陶瓷制品、玻璃器皿等之包裝</li> <li>3. 保溫材料，如冷凍食品包裝、保溫管及保溫板等</li> <li>4. 食品包裝，如魚/水果/蔬菜箱</li> <li>5. 建築材料</li> <li>6. 其他，如美工材料、展覽裝飾材頭盔襯等</li> </ol>

# FAST-MOLDING GRADE EPS-391

## 快速成型級 EPS-391

CHARACTERISTICS 特性	APPLICATIONS 應用
<ol style="list-style-type: none"> <li>1. Short cycle time</li> <li>2. Short condition time</li> <li>3. Physical properties similar to EPS-301</li> </ol> <ol style="list-style-type: none"> <li>1. 成型時冷卻時間短，生產周期縮短，降低制造成本</li> <li>2. 發泡粒成熟時間短</li> <li>3. 其他特性與EPS-301同</li> </ol>	<ol style="list-style-type: none"> <li>1. Lost Foam Casting (LFC)</li> <li>2. Protecting articles from breakage, e.g. packaging for electronics and electrical appliances, chinaware and glassware etc.</li> <li>3. Thermal Insulation, e.g. packaging for frozen foods, insulation tubes and plates etc.</li> </ol> <ol style="list-style-type: none"> <li>1. 消失模</li> <li>2. 保護物品避免破裂震壞，如電子產品、陶瓷制品、玻璃器皿等之包裝</li> <li>3. 保溫材料，如冷凍食品包裝、保溫管及保溫板等</li> </ol>

# FLAME RETARDANT GRADE EPS-321, EPS-321L

## 難燃級 EPS-321, EPS-321L

CHARACTERISTICS 特性	APPLICATIONS 應用
<ol style="list-style-type: none"> <li>1. Passed 94HF-1 self-extinguishing test</li> <li>2. Physical properties similar to EPS-301</li> <li>3. 321L: Pentane content level &lt; 5%</li> </ol> <p>1. EPS-321: 通過94HF-1防火測試, 具優越難燃性</p> <p>2. 其他特性與EPS-301同</p> <p>3. EPS-321L: 發泡劑含量&lt;5%, 通過94HF-1防火測試, 具優越難燃性</p>	<ol style="list-style-type: none"> <li>1. Thermal insulation, e.g. packaging for insulation tubes and plates etc.</li> <li>2. Construction materials, e.g. sandwich plates and isolation plates etc.</li> <li>3. Lightweight fill for slope stabilization and soft ground reinforcement</li> <li>4. Packaging for electronics and electrical appliances etc.</li> </ol> <p>1. 保溫材料, 如保溫管及保溫板等</p> <p>2. 建築材料, 如複合板、隔間材料等</p> <p>3. 輕質填土材料</p> <p>4. 電氣產品襯墊</p>

# ANTI-STATIC GRADE EPS-351

## 抗靜電級 EPS-351

CHARACTERISTICS 特性	APPLICATIONS 應用
<ol style="list-style-type: none"> <li>1. Good anti-static effect</li> <li>2. Physical properties similar to EPS-301</li> </ol> <p>1. 成型品抗靜電效果良好</p> <p>2. 其他特性與EPS-301同</p>	<ol style="list-style-type: none"> <li>1. Reducing the buildup of static electricity, protecting articles from shock, avoiding dust adsorption, e.g. packaging for precision electronics etc.</li> </ol> <p>1. 保護物品避免破壞、震壞、並要求不受空氣灰塵附著者, 如精密電子零件包裝</p>

# FOOD GRADE EPS-361

## 食品級 EPS-361

CHARACTERISTICS 特性	APPLICATIONS 應用
<ol style="list-style-type: none"> <li>1. Low residual styrene monomer content, corresponding with national food standards</li> <li>2. Physical properties similar to EPS-301</li> </ol> <p>1. 殘留苯乙烯單體含量低, 符合國家食品衛生標準</p> <p>2. 其他特性與EPS-301同</p>	<ol style="list-style-type: none"> <li>1. Packaging for foods, e.g. cake, fish and ice-cream boxes etc.</li> <li>2. Packaging for dinner sets</li> </ol> <p>1. 食品包裝, 如蛋糕盒、魚箱、冰淇淋盒等</p> <p>2. 杯盤之類產品</p>

# LOW DENSITY GRADE EPS-381

## 特輕級 EPS-381

CHARACTERISTICS 特性	APPLICATIONS 應用
<ol style="list-style-type: none"> <li>1. Can be processed over a wide range of molding conditions</li> <li>2. Good strength</li> <li>3. Low steam consumption</li> </ol> <p>1. 加工成型時之適用溫度範圍較廣</p> <p>2. 強度良好</p> <p>3. 蒸氣消耗量少, 節省能源</p>	<ol style="list-style-type: none"> <li>1. Low density block and case molding</li> <li>2. Filler material for handicraft</li> </ol> <p>1. 輕質板材, 高倍率之成型加工</p> <p>2. 工藝品填充等</p>

LIFE IS BETTER... WITH TAITA 有台達的日子更好



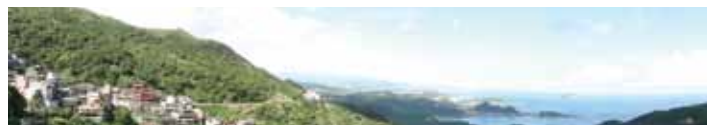
## ABOUT US | 關於我們



As one of the top producers of styrenics in Taiwan, Taita Chemical Company, Limited holds a global reputation as a pioneer in the field. Established in 1960, Taita Chemical was the first to produce both Expandable Polystyrene and General Purpose Polystyrene in Taiwan. Taita Chemical Company is a part of a larger petrochemical group called USI Group, extending its logistical efficiency and resources. With over 50 years of experience, Taita Chemical boasts having not only one of the lowest styrene residual monomer ratios in the world (GPPS), but also a versatile product line and excellent customer service. Taita Chemical's product line now includes Acrylonitrile-Butadiene-Styrene (ABS), General Purpose Polystyrene (GPPS), High Impact Polystyrene (HIPS), and Expandable Polystyrene (EPS), as well as Glass Wool and Cubic Printing. Furthermore, Taita's environmentally conscientious plant has been granted ISO 9001, ISO 14001, OHSAS 18001, and Sony Green Partner certification.

台達化工成立於西元1960年，是台灣第一家生產發泡聚苯乙烯、聚苯乙烯樹脂的製造商，在業界是領先的品牌，在全球亦擁有石化先驅的美譽。台達化工是台灣大型石化業—「台聚集團 (USI)」的成員之一，以集團現有的資源加上超過50年的生產經驗，除提供市場多樣化的產品外，並以最佳的服務品質滿足客戶的需求。台達化工除生產ABS/GPS/IPS/EPS外並跨足玻璃棉及曲面印刷加工等產業。台達化工通過的認證有ISO 9001, ISO 14001, OHSAS 18001及Sony Green Partnership等。

## CONTACT US | 聯絡我們



### HEAD TAIPEI OFFICE

12th Floor No. 39 Jihu Road  
Neihu District  
Taipei City 114, Taiwan  
Tel: 886-2-8751-6888  
Fax: 886-2-2798-3260

### KAOSIUNG BRANCH OFFICE

No. 3 Jianji Street  
Qianzhen District  
Kaohsiung City 806, Taiwan  
Tel: 886-7-821-2128  
Fax: 886-7-821-7808

### CHIEN CHEN PLANT

No. 3 Jianji Street  
Qianzhen District  
Kaohsiung City 806, Taiwan  
Tel: 886-7-821-9521  
Fax: 886-7-811-2150

### LIN YUAN PLANT

No. 5 Industrial 1st Road  
Linyuan Township  
Kaohsiung County 832, Taiwan  
Tel: 886-7-641-3201  
Fax: 886-7-641-4544

### TOUFEN PLANT

No. 571 Minzu Road  
Toufen Township  
Miaoli County 351, Taiwan

### GLASSWOOL:

Tel: 886-37-627-700  
Fax: 886-37-627-704

### CUBIC PRINTING:

Tel: 886-37-627-705  
Fax: 886-37-623-027

### ZHONG SHAN PLANT

Zhongshan High Technology  
Industry Development Zone  
Yanjiang East 2nd Road  
Zhongshan, Guangdong  
528437, China  
Tel: 86-760-8531-6689  
Fax: 86-760-8338-2493

### TIAN JIN PLANT

Chemical Industry Park  
Tianjin Economic Technological  
Development Area  
No. 8 Hengshan Road,  
Tianjin 300480, China  
Tel: 886-22-6716-2786  
Fax: 886-22-6716-2926

### 總公司

114台北市內湖區  
基湖路39號12樓  
電話: 886-2-8751-6888  
傳真: 886-2-2798-3260

### 高雄營業所

806高雄市前鎮區建基街3號  
電話: 886-7-821-2128  
傳真: 886-7-821-7808

### 前鎮廠

806高雄市前鎮區建基街3號  
電話: 886-7-821-9521  
傳真: 886-7-811-2150

### 林園廠

832高雄縣林園工業區  
工業一路5號  
電話: 886-7-641-3201  
傳真: 886-7-641-4544

### 頭份廠

351苗栗縣頭份鎮  
民族路571號

### 玻璃棉:

電話: 886-37-627-700  
傳真: 886-37-627-704

### 曲面印刷:

電話: 886-37-627-705  
傳真: 886-37-623-027

### 大陸中山廠

(郵編528437)廣東省中山市  
火炬開發區沿江東二路  
電話: 86-760-8531-6689  
傳真: 86-760-8338-2493

### 大陸天津廠

(郵編300480)中國天津市  
經濟技術開發區化工區  
衡山路八號  
電話: 886-22-6716-2786  
傳真: 886-22-6716-2926



Taita Chemical Company, Limited  
台達化學工業股份有限公司  
[www.ttc.com.tw](http://www.ttc.com.tw)