

CAPABILITY TO DESIGN  
TEST AND MANUFACTURE OWN  
PRODUCTS COMPLETELY IN HOUSE

## EMPILON® THE NAME YOU CAN TRUST

创新 释放氯化热可塑弹性体的新生命  
EMPILON® 优能胶的诞生

自从1972年，以自行创新研发的TPR热可塑性橡胶材料开始同时，也研发改良注塑成型机器设备与模具并用于自行生产制造的鞋材大底工厂，此材料与成型技术延续至今仍被业界广泛使用。之后，为了因应快速成长中的国际市场，创造比TPR更多元性与先进的应用材料：於1986年开始针对各种不同产业之需求，而研发与运用参配配方技术并制造生产氯化热可塑性弹性体HTPR，(Hydrogenated Thermal Plastic Rubber)，并自创品牌为「优能胶」(EMPILON®)



抢先活用EMPILON® 优能胶 拉开竞争差距

EMPILON® 优能胶卓越的材料竞争力  
适用于各种需要弹性材料的任何产业  
优能胶(EMPILON®)材料运用范围：

- 射接成型(Overmolding)与ABS, PC, Nylon以及PBT...等硬质塑胶与工程塑胶材质，可用于电脑资讯、通讯，家电等3C产品，以及五金工具，运动用品...等。
- 电线电缆：一般级与符合RoHS，欧盟WEEE以及Sony SS-00259，不含重金属以及卤素成分之规范可用于讯号，电源线材，线端插头...等
- 医疗食品器材：符合FDA规范可用于针筒塞，食品容器，配管与棕垫，奶嘴，防毒面具...等
- 运动器材：潜水器材，握把，玩具...等
- 工业用品：浇水软管，工具与玩具车轮，垫圈...等
- 汽车零件：空气导管，防护罩，保险杠及附件，车身饰条，档泥板...等等
- 其他：鞋材及配件，各式握把



**EMPILON 优能胶**  
Thermoplastic Elastomer Professional

## GREATER CHARACTERISTICS

深入 透析EMPILON® 优能胶的无限可能

EMPILON® 优能胶是一种A-B-A分子结构聚合体的参配混合体，它由两端硬质苯乙烯和一个软质弹性中间基如乙烯/丁烯或乙烯/丙烯所组成因此，可透过加热产生软化与流动进行注塑加工；冷却后即可定型同时保有弹性。EMPILON® 优能胶可广泛使用于注塑成型、挤出成型以及吹塑成型，透过产品加工步骤的简化EMPILON® 优能胶可以让产品更具竞争力

EMPILON® 优能胶的材料特性

- 软硬度范围广，由Shore C8软度到Shore D50硬度
- 透明性佳，可以达到全透明程度
- 止滑性，密封性与防震性佳
- 耐高温(一般使用可达85°C但特殊规格可达180°C)及耐低温性(最低-56°C)
- 医疗食品卫生性(符合FDA)
- 耐候性佳
- 抗化学性，具有优良的抗水及耐酸硷性，也可以短期浸泡于溶剂或油中
- 高抗张性及低压缩变形性
- 延伸性(最低可达500%)
- 优良电特性，如绝缘性，耐电压以及抗电磁波
- 环保性，可以100%回收再使用

## CONTINUOUSLY BUSINESS GROWING BY DIFFERENTIAL COMPETITION

拥有差异化优势才是未来关键竞争力

持续的投入研发制造与创新，是和泰公司的一贯坚持与传承，为了继续保持EMPILON® 产品规格多样化与完整性以及品质完美与稳定，从研究发展的过程，就投入大量的经费，引进精密研究与检测设备，加上自行研发独特生产设备与制造方式，并延揽高学历专业研发人才与专业制造人才，以自我开发与实验性试产，以确保量产的稳定与品质；并时时以新的改良与创新材料，以更好的物性与新的用途以及随时可为客户量身订做为目标，自我挑战。

除此之外，EMPILON® 更重视人才素质的培训与养成，每一位市场与行销人员，皆具有专业技术背景，来协助客户的产品开发与提升对客户的服务品质，并积极配合每一位客户的需求提供完善的解决方案，来赢得每一位客户的信心。

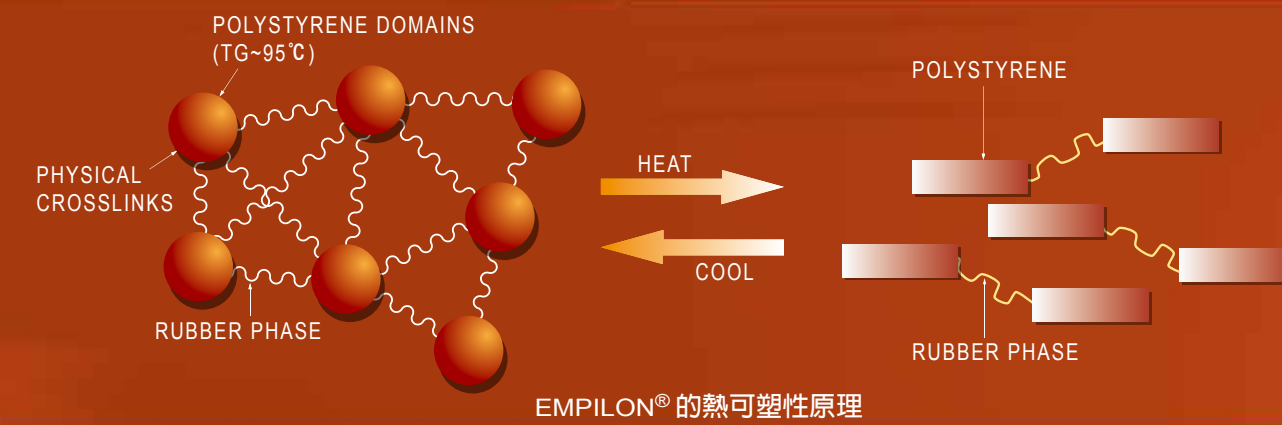


# AN HISTORY OF CONTINUAL GROWTH

In 1972, Ho Tai company developed Thermal Plastic Rubber (TPR) material as well as a unique Injection molding tool together with a renovated injection molded machine for shoe sole production. The material is an advanced revolutionary product still used extensively today by good many manufactures. In 1986, in answer to a rapidly growing need for a wide variety of functional applications of the product in the market, Ho Tai collaborated with Shell Oil Company to license the use of its polymer compound known as HTPR (Hydrogenated Thermal Plastic Rubber) in Taiwan. Marketed as EMPILON® this elastomer compound offers greater characteristics created to resist much higher temperature, chemical oxidation and weather erosion than TPR.

## THE CHARACTERISTICS OF EMPILON®

EMPILON® is a formulated compound based on styrene-ethylene/butylenes-styrene or styrene-ethylene/propylene-styrene block copolymer. It is an A-B-A type structure of hard plastic polymer at the two ends and a soft elastomer polymer in the middle. This configuration renders the material malleable through heat molding and easily shaped at room temperature still maintaining sturdy and elasticity characteristics.



## EXCELLENT PRODUCT

Attention to details is the secret of Empilon's flawless production. Beginning with R&D, every step is carefully monitored to ensure a comprehensive Total Quality System. Setting EMPILON® apart from the competition is its laboratory created exclusively to develop new products.

This fully equipped laboratory allows EMPILON® to perform complete product testing and manufacturing on a smaller scale before running the full scale production. Moreover, with the R&D's new product development, EMPILON® has the capability to design, test and manufacture its own products completely in-house, guaranteeing the highest quality possible.



## THE RIGHT PEOPLE

EMPILON® goes to great lengths to hire, train, and promote the right people. Empilon's R&D personnel are carefully selected for their overall knowledge of engineering and their specific talent in chemistry and chemical engineering. All salespeople are experienced chemical engineers with very good knowledge and experience in the elastomer and plastic material field. Therefore, all EMPILON® customers will always receive more informed, professional service.