

TPE Thermoplastic edge for insulating glass (warm spacer)

中空玻璃专用TPE 热塑性隔条（暖边）

TPE 由热塑性基材和复合干燥剂所组成，使得两玻璃之间保持长久干燥。

TPE 配合适当的涂布机直接挤涂在玻璃上完全取代传统的金属、塑料隔条，分子筛和丁基胶。

第二道胶使用双组份密封胶（聚硫胶、硅酮胶）用于中空玻璃的生产。

The TPE consists of the thermoplastic substrate and the composite desiccant to maintain the glasses dry for a long time.

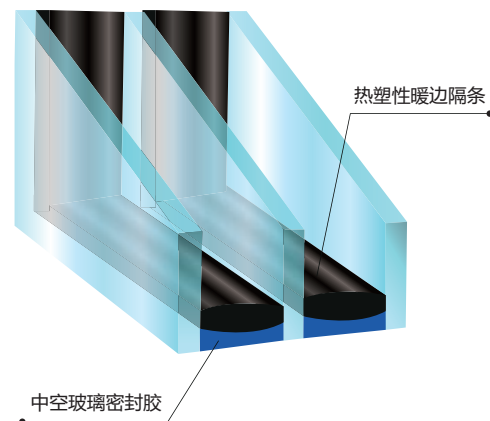
TPE is directly extruded onto the glass with a suitable coating machine to completely replace the traditional metal, plastic partition, molecular sieve and butyl rubber. Secondary sealants are still used in the insulating glass production with the verified two-component sealants Polysulfide and Silicone.

产品特征

- * 出色的暖边材料，由于去掉金属隔条，该密封胶可提高中空玻璃的热阻隔能力。
- * 较低的水汽和气体透过率
- * 提高边缘的 U 值（“暖边”）
- * 最大减少中空玻璃边缘结露现象
- * 高自动化生产

Product Features

- * Excellent warm edge material can improve the thermal barrier of insulating glass due to the removal of metal spacers.
- * Lower water vapor and gas permeability.
- * Improving the U value of the edge (Warm Edge).
- * Minimizing condensation at the edges of insulating glass.
- * High automation production.

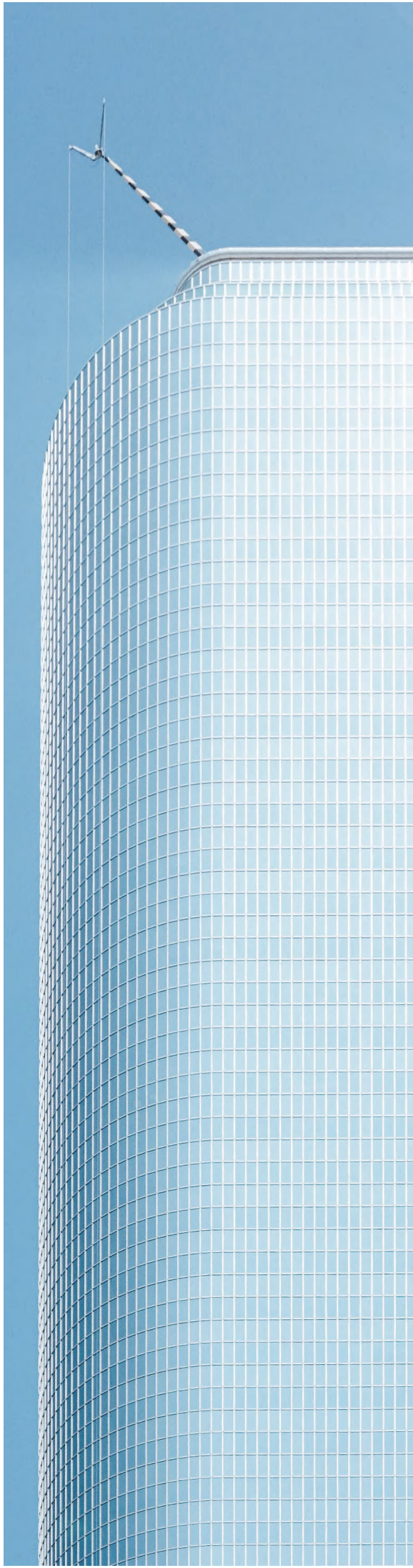


技术数据

基材	人工合成橡胶（聚异丁烯），不含溶剂
颜色	黑色
粘稠度	固体化合物，在高温下配合涂覆机可供使用。
稳定性	用于 -20°C至 +70°C宽泛的外界条件下
密度	约 1.24g/cm ³
气体透过率	<0.01g/m ² .h
水汽透过率	<0.395g/m ² .h
挥分	≤ 0.5%
雾状	无可视雾气
水分容纳量	3.9%
撕裂强度	0.6N/mm ²
转矩	375Nmm
热传导率	0.3W/(m.k)
分子筛孔径	3A

Technical Parameters

Base Material	Artificial Rubber(Polyisobutene), Solvent-Free.
Color	Black
Viscosity	Solid compound can be used with coating machine at high temperature.
Service Temperature of insulating glass	From -20°C to +70°C
Density	About 1.24g/cm ³
Gas Transmission Rate	<0.01g/m ² .h
Water Vapor Transmission	<0.395g/m ² .h
Volatile	≤ 0.5%
Vaporific	No visible fog
Moisture tolerance	3.9%
Tear Strength	0.6N/mm ²
Torque	375Nmm
Pyroconductivity	0.3W/(m.k)
Molecular Sieve Pore Size	3A



优势

TPE 热塑性隔条进一步的优势：比较需要手工放置在玻璃上的刚性的隔条，TPE 的直线度及放置位置的精确度更好，尤其在大型中空玻璃上尤为明显。对于三层中空玻璃，TPE 的应用使得在两个隔条之间没有错位，解决了三层中空的隔条重叠问题。

- * 边缘的凝露最小化
- * 霉化的潜在性更少
- * 维修成本与频率降低（如：木质窗户的油漆更少）
- * 居室的舒适性得到改善
- * 在玻璃和窗框之间的视觉效果更诱人

Advantages

- * The spacer is always parallel to the glass edge, also for big glass sizes.
- * The spacer gives a consistent and accurate seal depth, this is particularly important with triple insulating glass.
- * The overall thickness of the insulating glass can be adjusted to exact measurements, independent of glass tolerances.
- * The corners are formed perfectly each time.
- * The color of the window frames reflected on to the spacer.
- * Completely metal free material with very low heat conductivity.
- * Minimizes condensation formation.
- * Improves the internal environment, giving more comfort.
- * Reduces heating costs.

用途

建筑玻璃、工业玻璃、电器、冰柜门、汽车玻璃、火车、高铁等行业用密封剂。

Application Scope

Suitable for building glass, industrial glass, electrical equipment, freezer door, automobile glass, train, high-speed railway and other industries.

中空玻璃专用TPE 热塑性隔条 (暖边)

TPE 热塑性隔条中空系统性能特点：

- * 热塑性材料相比铝条的热传导系数降低 60% 以上，降低能源消耗
- * 长久保持惰性气体 25 年以上，并含量高于 80%；
- * TPE 具备高密封性并含有干燥剂成分，玻璃无起雾、凝露、漏水现象产生；
- * 有效降低干燥剂消耗，保护 Low-E 膜，中空玻璃实际使用寿命延长 1.6-5 倍；
- * 有效缓解泵效应，避免密封胶内溢或开裂现象。

全新的中空玻璃生产系统解决方案：

- * 双胶桶供胶系统可在生产中进行换胶，实现连续性生产；
- * 可不间断生产各种异形玻璃、三边大小片、多腔体与不等腔等；
- * 减去了普通铝条的锯切、折弯、分子筛灌装、丁基胶涂布等复杂工序；
- * 无需储存不同类型和规格的金属间隔条，以及分子筛，节省空间；
- * 可轻松实现玻璃间隔条宽度的切换；



TPE Insulating Glass Characteristics

- * The thermal conductivity of the thermoplastic material is reduced by more than 60% compared with aluminum spacer, reducing energy consumption.
- * Keep the gas for more than 25 years and the content is more than 80%
- * TPE has high sealing performance and contains desiccant, the IG units without fog, condensation and water leakage
- * Effectively reduce desiccant consumption, protect Low-e film, the IG units service life extended by 1.6-5 times
- * Effectively reduce thermal expansion and contraction, to avoid sealant overflow or cracking

New Insulating Glass production system solution

- * Double pump supply system can change sealant during production to achieve continuous production Non-stop production for all kinds of special shape and multi-chamber units
- * Remove complex processes such as spacer sawing, bending, desiccant filling and butyl coating
- * No need to store different types and specifications of metal spacers, as well as desiccant, saving space
- * The width of the spacer can be easily changed from 6mm to 19mm