

# **MEDICAL**

医疗用品



# **CONTENTS**

••	TPE: Endless Application Possibilities 02				
••	Exacting Medical Standards				
••	TPE Portfolio Series: M	edical Sector			
	THERMOLAST® M	Adhesion Materials	TPE		
	MC/AD1 MC/HE MC/LF MC/RS MC/tl	PC   ABS   PC/ABS PP PP PP PP	TPS TPS TPS TPS TPS	07 07 08 09 10	
	Technical Info at a Click			11	
••	Brighten Up with Colors	5		13	
••	Bring Your Ideas to Life			14	
••	• Our Standards of Excellence				
••	• CARING YOU & ME				





To stay competitive in business, manufacturers and business owners must use technology advances to help them stay ahead. In recent years, the use of thermoplastic elastomers (TPEs) has seen significant increases, helping businesses explore endless product application possibilities, innovate and remain competitive.

Thermoplastic elastomers (TPEs) are as elastic as rubber and as processable as plastics. That's why today's product developers and designers choose to work with TPEs because of its extraordinary mechanical properties with high degree of transparency and colorability.

Whether for automotive, consumer and personal care, medical, industry and more – you will be able to add value to your products through our diverse and customizable line of TPE compounds. At KRAIBURG TPE, we offer you endless application possibilities with the functionality, flexibility and superiority of premium quality TPEs.

对于制造商与企业家而言,唯有先进的技术,方是最为强劲的竞争优势,才能在专业领域独占鳌头。近些年来,各大企业纷纷热衷于使用热塑性弹性体 (TPE) 来探索产品应用的无限可能,以积极创新研究,保持竞争优势。

热塑性弹性体 (TPE) 具备橡胶般的弹性特质,又有着类似塑料的加工优势,而其卓越的机械性能,以及高透明性与着色性,更是令当代各大产品研发者与设计师趋之若鹜。

客户可个性化的定制 TPE 化合物产品应用于各行各业,如汽车、医疗、工业、消费品与个人护理等,并可顺利的提升产品价值。凯柏胶宝的优质 TPE,其功能强大、灵活实用且性能出色,助您开创无限应用可能。

KRAIBURG TPE

# **EXACTING MEDICAL**STANDARDS

Safety ,quality and comfort are Prerequisites for the medical and phamaceutical industries.

Medical product designers and manufacturers have come to rely on KRAIBURG TPE to provide technically advanced medical grade TPEs to meet a variety of critical medical requirements. KRAIBURG TPE's exclusive TPE compounds are able to be in contact with pharmaceutical mediums or blood, which will be lead into the human body or to the blood circuit. All medical compounds in the portfolio are tested according to ISO 10993-5 "Cytotoxicity".

"安全"、"品质"与"舒适度"是医疗和制药行业的基本准则。

越来越多的医疗产品设计师和制造商信赖凯柏胶宝,选择使用技术先进的 医用级TPE,以进一步满足自身的关键医疗要求。凯柏胶宝独特的TPE医药化 合物能够接触制药介质和血液,然后进入人体或血液循环。产品组合中的所 有TPE 医药化合物均按照ISO 10993-5"细胞毒性"进行了测试。















Series系列 MC/AD1 The MC/AD1 Series is your material solution for applications requiring basic medical approvals such as ISO 10993-5. The series is characterized by excellent adhesion properties to polar thermoplastics such as PC, ABS, PC/ABS. The compounds are produced exclusively by a special medical unit.

MC/AD1系列是用于基本医疗批复(如 ISO 10993-5) 应用的材料解决方案,该系列的特点对 PC、ABS 和 PC/ABS等极性热塑性材料拥有卓越的包胶性能。这类化合物仅由专门的医疗部门生产。

Compound Name 化合物名称	Hardness 硬度	Color	颜色	Adhesion 包胶	
• TMxADT	34-73 Shore A	Natural	本色	PC ABS PC/ABS	
Typical Applications		典型应用			
<ul><li>Flexible Connections</li><li>Membranes</li><li>Seals</li><li>Soft touch</li><li>Valves</li></ul>		<ul><li>柔性连接器</li><li>薄膜</li><li>密封件</li><li>软触感</li><li>阀门</li></ul>			
Material Advantages		材料优势			
<ul> <li>DMF listed</li> <li>Excellent mechanical properties</li> <li>For injection molding</li> <li>Free of animal based ingredients</li> <li>KRAIBURG TPE Medical service package (Please refer to the technical data sheet)</li> <li>Sterilizable (autoclave 134°C, gamma radiation 2x35 kGy, EtO)</li> <li>Tested according to ISO 10993-5</li> </ul>		<ul> <li>药品主控文件 (DMF) 认证</li> <li>卓越的机械性能</li> <li>用于注塑成型</li> <li>无动物性成分</li> <li>凯柏胶宝公司医疗服务套件 (请参阅相关技术数据表)</li> <li>可消毒灭菌 (134°C 高压灭菌、2 x 35 kGy 伽玛辐射、环氧乙烷)</li> <li>遵循 ISO 10993-5 标准测试</li> </ul>			

## THERMOLAST® M

Series系列 **MC/HE**  The MC/HE Series is your material solution for applications requiring basic medical approvals such as ISO 10993-5. The series is characterized by combining excellent elasticity with high hardness. The compounds are produced exclusively by a special medical unit and available in transparent colors.

MC/HE 系列是用于基本医疗批复(如 ISO 10993-5)应用的材料解决方案。该系列的特点在于将卓越的弹性和高硬度结合了起来。这类化合物仅由专门的医疗部门生产,拥有半透明颜色可供选择。

Compound Name 化合物名称	Hardness 硬度	Color	颜色	Adhesion 包胶	
• TMxHET	39-52 Shore D	Transparer	it 透明	PP	
Typical Applications	典型应用				
<ul><li> Drip chamber</li><li> Luer lock</li><li> Squeeze bottles</li></ul>		<ul><li>挤压瓶</li><li>滴注器</li><li>鲁尔锁紧头</li></ul>			
Material Advantages		材料优势			
<ul> <li>Adhesion to PP</li> <li>DMF listed</li> <li>Free of animal based ingredients</li> <li>High elasticity</li> <li>High stiffness</li> <li>KRAIBURG TPE Medical service package (Please refer to the technical data sheet)</li> <li>Sterilizable (autoclave 134°C, gamma radiation 2x35 kGy, EtO)</li> <li>Tested according to ISO 10993-5</li> </ul>		<ul> <li>包胶 PP</li> <li>药品主控文件(DMF)认证</li> <li>无动物性成分</li> <li>高弹性</li> <li>高刚度</li> <li>凯柏胶宝公司医疗服务套件 (请参阅相关技术数据表)</li> <li>可消毒灭菌(134°C高压灭菌、2×35 kGy伽玛辐射、环氧乙烷)</li> <li>遵循 ISO 10993-5 标准测试</li> </ul>			

## Series 系列 **MC/LF**

The MC/LF Series is your material solution for applications requiring basic medical approvals such as ISO 10993-5. The series convinces due to its extremely low friction coefficient. The compounds are produced exclusively by a special medical unit and available in translucent colors.

MC/LF 系列是用于基本医疗批复(如 ISO 10993-5)应用的材料解决方案。该系列拥有极低的摩擦系数。这类化合物仅由专门的医疗部门生产。拥有半透明颜色可供选择。

Compound Name 化合物名称	Hardness 硬度	Color	颜色	Adhesion 包胶		
• TMxLFT	29-88 Shore A	Translucent	半透明	PP		
Typical Applications	Typical Applications		典型应用			
<ul><li>Mechanical components</li><li>Seals</li><li>Syringe gaskets</li></ul>		<ul><li>密封件</li><li>机械部件</li><li>注射器密封圈</li></ul>				
Material Advantages		材料优势				
<ul> <li>Adhesion to PP</li> <li>DMF listed</li> <li>Excellent mechanical properties</li> <li>For injection molding</li> <li>KRAIBURG TPE Medical service package (Please refer to the technical data sheet)</li> <li>Sterilizable (autoclave 134°C, gamma radiation 2x35 kGy, EtO)</li> <li>Tested according to ISO 10993-5</li> </ul>		<ul> <li>包胶 PP</li> <li>药品主控文件 (DMF) 认证</li> <li>卓越的机械性能</li> <li>用于注塑成型</li> <li>凯柏胶宝公司医疗服务套件 (请参阅相关技术数据表)</li> <li>可消毒灭菌 (134°C 高压灭菌、2 x 35 kGy 伽玛辐射、环氧乙烷)</li> <li>遵循 ISO 10993-5 标准测试</li> </ul>				

## Series系列 **MC/RS**

The MC/RS Series is your material solution for applications requiring basic medical approvals such as ISO 10993-5. The series is characterized by excellent adhesion properties to polar thermoplastics such as PC, ABS, PC/ABS. The compounds are produced exclusively by a special medical unit.

MC/RS 系列是用于基本医疗批复(如 ISO 10993-5)应用的材料解决方案。该系列的特点在于卓越的再密封性能。这类化合物仅由专门的医疗部门生产,拥有半透明颜色可供选择。

Compound Name 化合物名称	Hardness 硬度	Color	颜色	Adhesion 包胶	
• TMxRST	33-43 Shore A	Translucent	半透明	PP	
Typical Applications		典型应用			
<ul><li>Closures</li><li>Infusion stoppers</li><li>Membranes</li></ul>		<ul><li> 封口</li><li> 输液瓶塞</li><li> 薄膜</li></ul>			
Material Advantages		材料优势			
<ul> <li>Adhesion to PP</li> <li>DMF listed</li> <li>Excellent compression set</li> <li>For injection molding and extrusion</li> <li>Free of animal based ingredients</li> <li>KRAIBURG TPE Medical service package (Please refer to the technical data sheet)</li> <li>Outstanding resealing properties</li> <li>Sterilizable (autoclave 134 °C, gamma radiation 2x35 kGy, EtO)</li> <li>Tested according to ISO 10993-5</li> </ul>		● 包胶 PP ● 药品主控文件 (DMF) 认证 ● 卓越的压缩形变 ● 用于注塑成型和挤塑 ● 无动物性成分 ● 凯柏胶宝公司医疗服务套件 (请参阅相关技术数据表) ● 杰出的再密封性 ● 可消毒灭菌 (134°C 高压灭菌、2 x 35 kGy 伽玛辐射、环氧乙烷) ● 遵循 ISO 10993-5 标准测试			

Series系列 **MC/tl** 

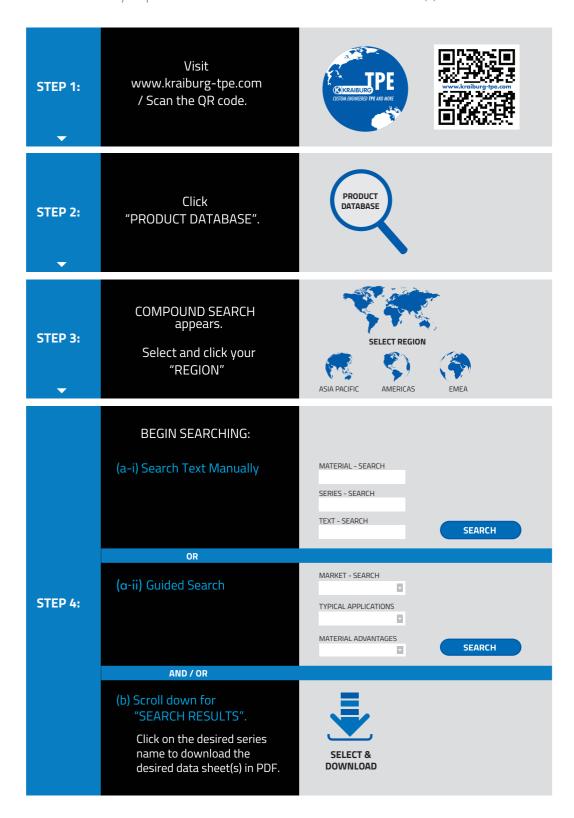
The MC/tl Series is your material solution for applications requiring basic medical approvals such as ISO 10993-5. The compounds are produced exclusively by a special medical unit and available in translucent color. MC/tl 系列是用于基本医疗批复(如 ISO 10993-5)应用的材料解决方案。这类化合物仅由专门的医疗部门生产,拥有半透明颜色可供选择。

Compound Name 化合物名称	Hardness 硬度	Color	颜色	Adhesion 包胶
• TMxMED	27-89 Shore A	Translucent	半透明	PP
Typical Applications	典型应用			
<ul><li>Flexible Connections</li><li>Mouthpieces</li><li>Seals</li><li>Soft touch</li><li>Valves</li></ul>		<ul><li>柔性连接器</li><li>烟嘴</li><li>密封件</li><li>软触感</li><li>阀门</li></ul>		
Material Advantages		材料优势		
<ul> <li>Adhesion to PP</li> <li>DMF listed</li> <li>Excellent compression set</li> <li>For injection molding and extrusion</li> <li>Free of animal based ingredients</li> <li>KRAIBURG TPE Medical service package (Please refer to the technical data sheet)</li> <li>Sterilizable (autoclave 134°C, gamma radiation 2x35 kGy, EtO)</li> <li>Tested according to ISO 10993-5</li> </ul>		<ul> <li>包胶 PP</li> <li>药品主控文件 (DMF) 认证</li> <li>卓越的压缩形变</li> <li>用于注塑成型和挤塑</li> <li>无动物性成分</li> <li>凯柏胶宝公司医疗服务套件 (请参阅相关技术数据表)</li> <li>可消毒灭菌 (134°C 高压灭菌、2 x 35 kGy 伽玛辐射、环氧乙烷)</li> <li>遵循 ISO 10993-5 标准测试</li> </ul>		

## TECHNICAL INFO AT A CLICK

Get online support by downloading our detailed KRAIBURG TPE technical data sheet(s) with processing guides and safety data sheet(s) anywhere in the world.

Follow these easy steps to download KRAIBURG TPE detailed data sheet(s):



下载凯柏胶宝的详细技术数据表、加工指南及安全数据表,获取在线帮助,随时随地,轻松便捷!

遵循以下简单步骤,下载凯柏胶宝的详细数据表:



# BRIGHTEN UP WITH COLORS

Set your products apart from the competition with KRAIBURG TPE customized color TPEs. Our TPE can be color compounded upon request, regardless of your application requirements, such as: special chemical, thermal resistance, different finishing and textures, or other exclusive properties. We will strive to fulfill your request in the most economic and optimal way possible, and assure a worldwide consistent color quality.

凯柏胶宝定制配色的热塑性弹性体让您的产品于市场上脱颖而出。无论任何的品应用需求,如特种化学品,抗热性质,各种成型和纹理或其他独特物性,我们的热塑性弹性体可根据您的要求进行配色。我们致力以最经济及最佳的方法去达成您的需求,并能提供全球一致性的颜色质量控管。

## "Comprehensive Solution!

Impress your customer and score with an appealing design and the perfect color. ••







## **OUR STANDARDS OF**

## **EXCELLENCE**

KRAIBURG TPE prides itself as a company that pursues quality, innovation and excellence at all levels. This quality management approach enables us to assure the quality requirements for both the applications and the customers – exceeding high standards of safety, quality and reliability. We will also continue to develop innovative products and continuously improve our performance, as all our employees are fully dedicated to the highest standards of:

"品质"、"创新"、"卓越"—— 六字箴言始终是凯柏胶宝的不懈追求的宗旨。我们实施最为严苛的安全、质量与可靠性标准。有效的质量管理体系随时都能满足客户在产品应用方面及确保质量的要求。在未来,我们将不断研发创新产品,持续提高企业表现。我们的专业人才,都致力于实现最高标准:

#### **QUALITY MANAGEMENT SYSTEM**

complying with the requirements of standard **ISO 9001** 

质量管理体系 严格遵循各项准则要求 ISO 9001

## ENVIRONMENTAL MANAGEMENT SYSTEM

complying with the requirements of standard ISO 14001

环境管理体系 **严格遵循各项准则要求** ISO 14001

## **ENERGY MANAGEMENT SYSTEM**

complying with the requirements of standard ISO 50001

能量管理体系 严格遵循各项准则要求 ISO 50001



## **CARING YOU & ME**

The importance of environmental conservation is a topic we are actively conscious about. KRAIBURG TPE takes important measures to ensure that our thermoplastic elastomers (TPEs) can be recycled nearly up to 100%. This allows us to melt down the thermoplastic elastomers again and again – saving on material use and ultimately, preserving the environment.

We have also initiated a landmark "CARING YOU & ME" initiative around the Asia Pacific region to make a difference in our lives. Our theme adopts a caring approach towards environment conservation and preservation, and towards our employees' health and safety concerns (EHS). Our goal is to work towards better environment preservation, health and safety while simultaneously maintaining harmony with nature in all our global operation activities.

凯柏胶宝始终热心于环境保护事业,并积极实施了多项重要措施。 我们热塑性弹性体 (TPE) 的再循环率几近百分百(热塑性弹性体可以反复熔化使用),从而可节省材料,达到环保的目的。

此外,我们在亚太地区发起了一项极具里程碑意义的 "CARING YOU & ME"活动,让我们能够更了解环保的重要性。主题活动不仅关注环境保护,同时还注重员工的健康与安全问题 (EHS)。是的,我们渴望更美好的生活,也立志为所有员工及社会营造更健康安全的工作环境。







## **MEDICAL**

Revolutionize unique innovations in medical technologies with our wide scope of approved medical compound series. Our sterilizable material is free of PVC, latex and silicone and stands for an excellent material performance and more!



Headquarters: Germany

## **Production Sites:**

## EMEA: Waldkraiburg, Germany

KRAIBURG TPE GmbH & Co. KG E-Mail: info@kraiburg-tpe.com

## **AMERICAS: Atlanta, USA**

KRAIBURG TPE Corporation
E-Mail: info-americas@kraiburg-tpe.com

## ASIA PACIFIC: Kuala Lumpur, Malaysia

KRAIBURG TPE TECHNOLOGY (M) SDN.BHD. E-Mail: info-asia@kraiburg-tpe.com

In further countries KRAIBURG TPE is represented by sales offices and distributors.

## www.kraiburg-tpe.com

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