



MEDICAL
医疗应用



**SAFETY THAT IS CERTAIN
TO IMPRESS**

安全至上 卓越品质

OUR COMPANY

BENEFITS IN ALL SHAPES AND SIZES

我们的公司

致力为各行各业提供优质热塑性弹性体 (TPE) 产品

Thermoplastic Elastomers (TPEs) are the materials used to make progress. Compounds from KRAIBURG TPE will open up all sorts of new opportunities in product development and processing making production efficient for you as well.

The solutions provided by KRAIBURG TPE will enable you to meet the highest requirements. Our company not only offers high-quality specially custom-engineered products, but also provides a unique level of comprehensive customer service.

The company's motto, "CUSTOM-ENGINEERED TPE AND MORE", is meant to be taken literally. Our goal is to identify the challenges you face with you and support you at all times anywhere in the world.

热塑性弹性体 (TPE) 是实现产品改进的重要材料。凯柏胶宝® 的化合物将为产品开发和加工开辟出全新的可能，让您的生产效率更加出色。

凯柏胶宝® 的TPE解决方案将竭力满足您的全部要求。我们公司不仅提供高品质的特殊定制产品，还用心提供全面而独家的客户服务。

公司一言一行，都在贯行“不只是定制 TPE”的座右铭。我们的目标是：与您携手，明确当前挑战，在世界各地随时随地为您提供支持。



Regional Headquarters
区域总部

Buford (GA) USA
布福德(乔治亚州)/美国



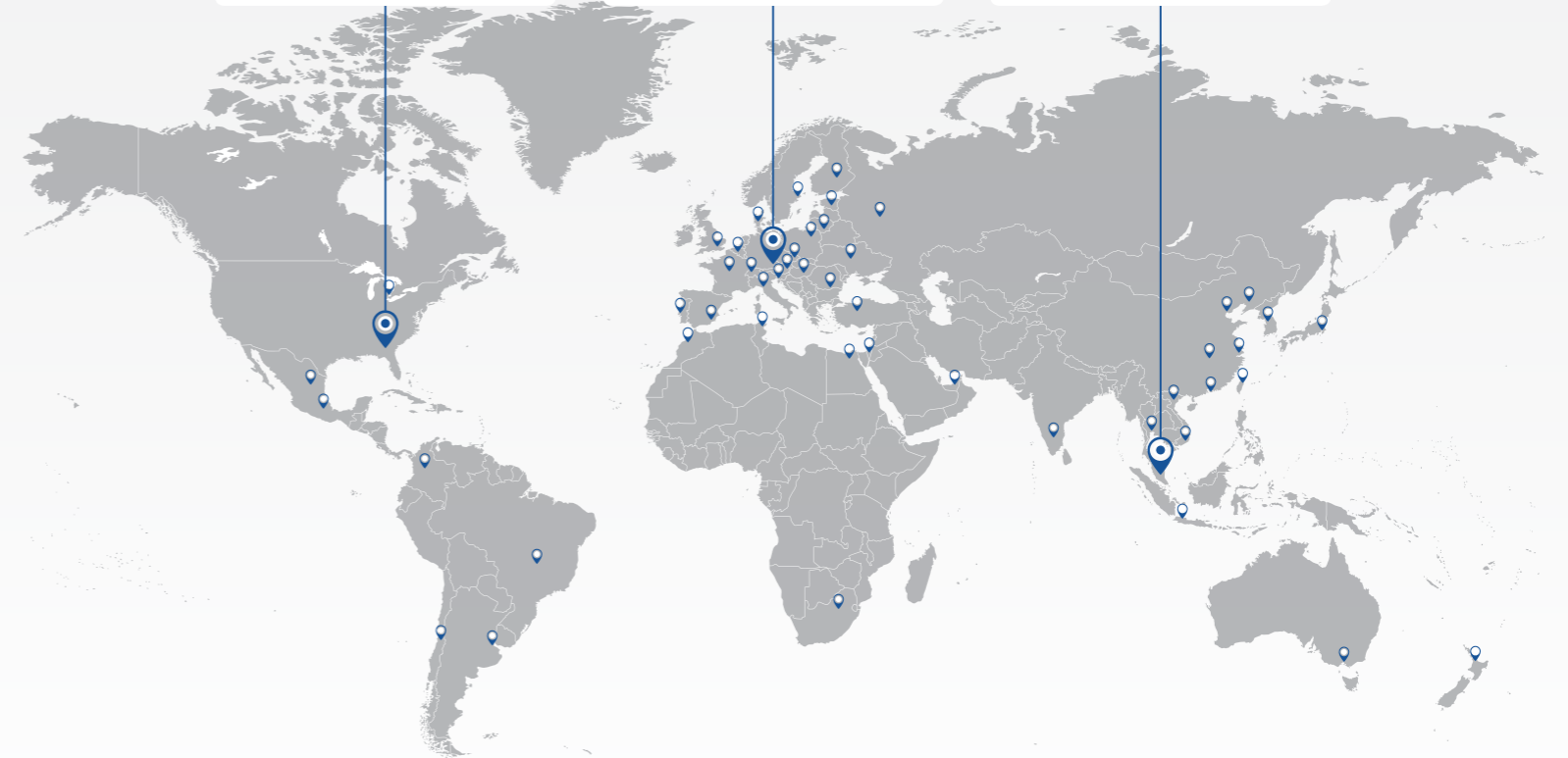
Headquarters
总部

Waldkraiburg GERMANY
瓦尔德克赖堡/德国



Regional Headquarters
区域总部

Kuala Lumpur MALAYSIA
吉隆坡/马来西亚





THE MARKET

MAKE THE SAFE CHOICE

市场

您的安全之选

Meeting the highest standards for quality and responsibility is an absolute necessity in the market for medical and pharmaceuticals technology.

That is why KRAIBURG TPE has implemented a quality management system that ensures compliance with the strictest requirements in the development, production, and handling of medical grade plastics (MGP).

The THERMOLAST® M series supplies compounds that have been specially developed for applications in the medical, pharmaceutical and diagnosis sectors. They can even be used in direct contact with body fluids and blood. For the processor and the end customer, the change control management system that we have implemented and are actively putting into practice ensures that vital requirements are met.

在医疗和制药市场中，符合质量标准至关重要。

因此，凯柏胶宝®实施了严格的质量管理体系，全力确保在医用级塑料 (MGP) 的开发、生产和加工中满足最严格的标准。

热塑宝 M 系列是专为医疗、制药和诊断应用领域开发的化合物，该系列材料被应用于直接接触体液和血液的医疗产品。

为确保产品始终符合各项关键规定，我们实施了变更控制管理系统并积极采取有效措施，从而保障制造商和最终客户的利益。

APPLICATION AREAS

GETTING THE JOB DONE EVERYWHERE

应用领域

TPE 无处不在, 放心, 可靠



MEDICAL ENGINEERING 医学工程

- Dental technology
- Hoses
- Lids/Closures
- Membranes
- Needle shields
- Plunger seals
- Valves
- 牙科技术
- 软管
- 盖子/闭合产品
- 薄膜
- 针防护件
- 柱塞密封件
- 阀门



DIAGNOSIS 诊断

- Bellows
- Plugs and septums
- Seals/Gaskets
- Valves
- 波纹管
- 插头和隔垫
- 密封件/垫圈
- 阀门



PHARMACEUTICAL PACKAGING 药品包装

- Lids/Closures
- Plugs and septums
- Seals/Gaskets
- Springs
- Valves
- 盖子/闭合产品
- 插头和隔垫
- 密封件/垫圈
- 弹簧
- 阀门

SAFETY AND PURITY

CHOOSE THE PUREST SOLUTION

安全和纯度

我们产品方案的两大特色

Our compounds exemplify the greatest possible product purity and highest processing safety standards. TPEs from the THERMOLAST® M series are produced exclusively at our headquarters in Waldkraiburg, Germany.

- Free from animal ingredients
- Free of latex, PVC, phthalates, and heavy metals
- Sterilizable using common methods
- Translucent or transparent

Selected compounds comply with recognized medical standards:

- » DIN ISO 10993-4 "Haemolysis, indirect blood contact"
- » DIN ISO 10993-5 "Cytotoxicity"
- » DIN ISO 10993-10 "Intracutaneous injection"
- » DIN ISO 10993-11 "Acute system toxicity"
- » USP Class VI Extraction tests
- » VDI 2017 Medical Grade Plastics

We will be happy to advise you right from the start of your project to ensure the greatest possible safety.

我们的化合物属于行业中极高纯度产品，这意味着我们满足了行业加工安全的最高标准。热塑宝 M 系列的热塑性弹性体仅在德总部瓦尔德克赖堡工厂生产。

- 不含动物性成分
- 不含乳胶、PVC、邻苯二甲酸盐和重金属
- 可使用常规方法消毒杀菌
- 半透明或透明

精心选择的成分符合广泛认可的医疗标准：

- » DIN ISO 10993-4 "溶血、间接血液接触"
- » DIN ISO 10993-5 "细胞毒性"
- » DIN ISO 10993-10 "皮内刺激"
- » DIN ISO 10993-11 "急性全身毒性"
- » USP Class VI 类 提取测试
- » VDI 2017 医用级塑料

我们热忱为您从项目初期提供咨询服务，助您保障全程安全。

DURABILITY AND FLEXIBILITY

THE TINIEST DETAILS COUNT

耐用性和灵活性

用细节向您证明

In addition to the purity of the raw materials used, THERMOLAST® M compounds also stand out through their performance characteristics:

- Adhesion to polyolefins and technical thermoplastics such as ABS, PC or PA by means of multi-component injection molding
- Durability and flexibility
- Excellent compression set characteristics
- Excellent resealing properties
- High transparency und pre-coloring options
- Injection molding and extruding possible
- Low-friction and highly elastic

We also take customer-specific materials requests to provide solutions that guarantee constant and unvarying quality. In addition, our compounds offer optimum soft-touch features.

除了原料纯度外，热塑宝 M 化合物还通过其性能特征脱颖而出：

- 可通过多组分注塑成型包胶聚烯烃和工程塑料，如ABS,PC, PA
- 耐用性和灵活性
- 出色的压缩变形特性
- 优异的再密封性能
- 高透明度和预着色选项
- 非凡的注塑和挤出工艺
- 低摩擦性和高弹性

我们还可根据客户特定的材料要求提供质量稳定持久的解决方案。此外，我们的化合物具有非常出色的柔软触感。



ADVICE AND SUPPORT

GETTING IT ALL GOING

咨询和支持

全力以赴

Quality, safety, and reliability are an absolute must in medical technology. We make sure these requirements are delivered by providing continuous and individualized customer care through a unique service package.

As we specialize in high-quality TPS, you can be sure of receiving material purity and expert advice at the highest level.

Your needs are our focus:

- Constant manufacturing process recorded in the drug master file
- 24-month availability guarantee (Change Control Procedure)
- Purity of the raw materials through commitment by suppliers
- Separate, permanently assigned production units for THERMOLAST® M

对于医疗技术而言，质量、安全性和可靠性三要素是绝对必要的先决条件。我们通过独特的服务套餐，为客户提供持续和个性化的服务，确保满足客户独特的需求。

我们从事专业制造高品质 TPS，致力为您提供高纯度的产品和高水平的专业服务。

您的需要就是我们的使命：

- 药品管理档案中记录的持续制造流程
- 保证 24 个月可用（变更控制流程）
- 供应商承诺的原料纯度
- 为热塑宝 M 指定的独立永久生产单元



SUSTAINABILITY

ALWAYS LOOKING TO THE FUTURE

可持续发展

立足当下，着眼未来

Sustainability is not just a buzzword at KRAIBURG TPE, it is a principle we live by. With us you are choosing a partner who takes on responsibility for the environment and society. Today and tomorrow.

Our compounds are PVC-free, halogen-free and recyclable.

- Certified worldwide in accordance with ISO 14001 and ISO 9001
- Headquarters in Germany certified in accordance with ISO 50001
- EH&S management, reporting & auditing
- Systematic energy management
- Annually renewed environmental protection and occupational safety program
- Selection of raw materials suppliers based on quality and environmental impact

在凯柏胶宝®，可持续发展不仅仅是一个时下流行的概念，更是我们身体力行的原则。选择我们，您将会拥有一位对环境、对社会有责任有担当的合作伙伴，不止当下，还有未来。

我们的化合物中不含PVC、卤素，并且可以回收利用。

- 全球所有生产基地皆符合 ISO 14001 和 ISO 9001 认证标准
- 德国总部符合 ISO 50001 认证标准
- EH&S 管理、报告和审计
- 系统的能源管理
- 每年更新环境保护和职业安全计划
- 根据质量和环境影响选择原材料供应商



TPE PORTFOLIO SERIES

MEDICAL SECTOR

TPE 产品系列

医疗应用

热塑宝 M THERMOLAST® M	包胶材料 Adhesion Materials
MC/AD1	ABS, PC, PC/ABS
MC/AD/PA	PA
MC/HE	PP
MC/LF	PP
MC/RS	PE, PP
MC/tl	PE, PP

热塑宝 H THERMOLAST® H	包胶材料 Adhesion Materials
HC/AD1/AP	ABS, PC, PC/ABS
HC/AP	PE, PP
HC/RS/AP	PE, PP

THERMOLAST® M | 热塑宝 M

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 its adhesion properties to polar thermoplastics e.g. ABS, PC and PET/PETG. The compounds are available in natural colors and can be colored in many different ways. The compounds are produced exclusively on a special medical unit.

MC/AD1 系列适用于基本医疗批复 (如 ISO 10993-5) 应用的材料解决方案。该系列具有包胶 ABS、PC 和 PET/PETG 等极性热塑性材料的特点。这类化合物为无色, 可用多种不同方式着色。这类化合物仅由专门的医疗部门生产。

Processing Method : Injection Molding | 加工方法 : 注塑成型

Compound Name 化合物名称	Hardness 硬度	Color 颜色	Adhesion 包胶
TMxADT	30 - 70 Shore A	Natural 本色	ABS, PC, PC/ABS

Typical Applications	典型应用
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- Flexible Connections
- Membranes
- Seals
- Soft touch application (e.g. handle or push button)
- Valves

- 柔性连接器
- 薄膜
- 密封件
- 软触感的应用 (例如手柄或按钮)
- 阀门

Material Advantages	材料属性
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- Adhesion to PC, ABS, PC/ABS, ASA, SAN
- Adhesion to PET and PETG
- Adhesion to PS
- Free from animal ingredients
- KRAIBURG TPE Medical Service Package
- Soft touch surface
- Sterilizable (autoclave 134 °C, β - γ -radiation 2x35 kGy, EtO)
- US DMF listed

- 包胶 PC、ABS、PC/ABS、ASA、SAN
- 包胶 PET 和 PETG
- 包胶 PS
- 不含动物性成分
- 凯柏胶宝®公司医疗服务包
- 柔软的表面触感
- 可消毒灭菌 (134 °C 高压灭菌、2 x 35 kGy 伽玛辐射、环氧乙烷)
- 美国药品主控文件 (US DMF) 认证

Regulations / Approvals	法规 / 批准
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- ISO 10993-4 (Hemolysis)
- ISO 10993-5 (Cytotoxicity)
- ISO 10993-10 (Intracutaneous injection)
- ISO 10993-11 (Acute systemic toxicity)
- USP <88> (Biological Reactivity, Class VI)
- VDI 2017

- ISO 10993-4 (溶血)
- ISO 10993-5 (细胞毒性)
- ISO 10993-10 (皮内刺激)
- ISO 10993-11 (急性全身毒性)
- USP <88> (生物活性试验, VI级)
- VDI 2017

THERMOLAST® M | 热塑宝 M

Series 系列

MC/AD/PA

The MC/AD/PA series is your material solution for applications requiring basic medical approvals such as ISO 10993-5. The series is characterized by its adhesion to various polyamides, such as PA6 and PA12. The compounds are available in natural colors and can be colored in a variety of ways. They are produced exclusively on a special medical unit.

MC/AD/PA 系列产品所提供的材料解决方案, 满足您应用领域的基本医疗认证需求, 如 ISO 10993-5。该系列产品可对各种聚酰胺材料, 如 PA6 和 PA12 进行包胶。这类化合物为无色, 可用多种不同方式着色。这类化合物仅由专门的医疗部门生产。

Processing Method : Injection Molding | 加工方法 : 注塑成型

Compound Name 化合物名称	Hardness 硬度	Color 颜色	Adhesion 包胶
TMxAPO	60 - 70 Shore A	Natural 本色	PA

Typical Applications	典型应用
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- Flexible connections
- Membranes
- Soft touch application (e.g. handle or push button)

- 柔性连接器
- 薄膜
- 软触感的应用 (例如手柄或按钮)

Material Advantages	材料属性
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- Adhesion to PA6 and PA12
- Colorable, also in effect colors
- Free from animal ingredients
- KRAIBURG TPE Medical Service Package
- Smooth touch
- Sterilizable (β - γ -radiation 2x35 kGy, EtO)

- 包胶 PA6 和 PA12
- 可染色, 也可做特殊效果颜色
- 不含动物性成分
- 凯柏胶宝®公司医疗服务包
- 光滑的触感
- 可消毒 (β - γ -radiation 2x35 kGy, EtO)

Regulations / Approvals	法规 / 批准
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- ISO 10993-4 (Hemolysis)
- ISO 10993-5 (Cytotoxicity)
- ISO 10993-10 (Intracutaneous injection)
- ISO 10993-11 (Acute systemic toxicity)
- Regulation (EU) No 10/2011
- US CFR 21 FDA (raw material conformity)
- VDI 2017

- ISO 10993-4 (溶血)
- ISO 10993-5 (细胞毒性)
- ISO 10993-10 (皮内刺激)
- ISO 10993-11 (急性全身毒性)
- 欧盟法规 (EU) No 10/2011
- US CFR 21 FDA (原材料符合性)
- VDI 2017

Thermolast® M | 热塑宝 M

Series 系列	The MC/HE series is your material solution for applications requiring basic medical approvals such as ISO 10993-5. The series is characterized by its elasticity and transparency at high hardness plus its adhesion to PP. The compounds are transparent and can be colored in many different ways. The compounds are produced exclusively on a special medical unit.
MC/HE	MC/HE 系列适用于基本医疗批复 (如 ISO 10993-5) 应用的材料解决方案。该系列材料在高硬度时具有出色的弹性, 可以包胶 PP。这类化合物为透明色, 可用多种不同方式着色。这类化合物仅由专门的医疗部门生产。

Processing Method : Injection Molding | **加工方法** : 注塑成型

Compound Name 化合物名称	Hardness 硬度	Color 颜色	Adhesion 包胶
TMxHET	40 – 50 Shore D	Transparent 透明	PP
Typical Applications	典型应用		
<ul style="list-style-type: none">Closure capsDrip chamberLuer lockSqueeze bottles	<ul style="list-style-type: none">封口盖子滴注器鲁尔锁紧头挤压瓶		
Material Advantages	材料属性		
<ul style="list-style-type: none">Adhesion to PPElasticityFree from animal ingredientsKRAIBURG TPE Medical Service PackageSterilizable (autoclave 134 °C, β-/γ-radiation 2x35 kGy, EtO)StiffnessTransparencyUS DMF listedWeldable (Ultrasonic)	<ul style="list-style-type: none">包胶PP弹性不含动物性成分凯柏胶宝®公司医疗服务包可消毒灭菌 (134 °C 高压灭菌、2 x 35 kGy 伽玛辐射、环氧乙烷)刚性透明美国药品主控文件 (US DMF) 认证可焊接 (超声波)		
Regulations / Approvals	法规 / 批准		
<ul style="list-style-type: none">ISO 10993-4 (Hemolysis)ISO 10993-5 (Cytotoxicity)ISO 10993-10 (Intracutaneous injection)ISO 10993-11 (Acute systemic toxicity)Regulation (EU) No 10/2011US CFR 21 FDA (raw material conformity)USP <88> (Biological Reactivity, Class VI)VDI 2017	<ul style="list-style-type: none">ISO 10993-4 (溶血)ISO 10993-5 (细胞毒性)ISO 10993-10 (皮内刺激)ISO 10993-11 (急性全身毒性)欧盟法规 (EU) No 10/2011US CFR 21 FDA (原材料符合性)USP <88> (生物活性试验, VI级)VDI 2017		

Thermolast® M | 热塑宝 M

Series 系列	The MC/LF series is your material solution for applications requiring basic medical approvals such as ISO 10993-5. The series convinces by a low coefficient of friction. The compounds are translucent and can be colored in many different ways. The compounds are produced exclusively on a special medical unit.
MC/LF	MC/LF 系列材料解决方案适用于 ISO 10993-5 等基本医疗批复应用。该系列拥有极低的摩擦系数。这类化合物为半透明色, 可用多种不同方式着色。这类化合物仅由专门的医疗部门生产。

Processing Method : Extrusion, Injection Molding | **加工方法** : 挤塑, 注塑成型

Compound Name 化合物名称	Hardness 硬度	Color 颜色	Adhesion 包胶
TMxLFT	30 – 90 Shore A	Translucent 半透明	PP
Typical Applications	典型应用		
<ul style="list-style-type: none">Mechanical componentsMembranesSealsSoft touch application (e.g. handle or push button)Syringe gaskets	<ul style="list-style-type: none">机械部件薄膜密封件软触感的应用 (例如手柄或按钮)注射器密封圈		
Material Advantages	材料属性		
<ul style="list-style-type: none">Abrasion resistanceAdhesion to PPKRAIBURG TPE Medical Service PackageLow surface frictionOptimized mechanical propertiesScratch resistanceSmooth touchSterilizable (autoclave 134 °C, β-/γ-radiation 2x35 kGy, EtO)US DMF listed	<ul style="list-style-type: none">耐磨性包胶PP凯柏胶宝®公司医疗服务包低表面摩擦力优异的机械特性耐刮擦光滑的触感可消毒灭菌 (134 °C 高压灭菌、2 x 35 kGy 伽玛辐射、环氧乙烷)美国药品主控文件 (US DMF) 认证		
Regulations / Approvals	法规 / 批准		
<ul style="list-style-type: none">Compatible for HDPE Recycling certified by Cyclos HTPCompatible for PP Recycling certified by Cyclos HTPISO 10993-4 (Hemolysis)ISO 10993-5 (Cytotoxicity)ISO 10993-10 (Intracutaneous injection)ISO 10993-11 (Acute systemic toxicity)Regulation (EU) No 10/2011US CFR 21 FDA (raw material conformity)USP <88> (Biological Reactivity, Class VI)VDI 2017	<ul style="list-style-type: none">兼具 Cyclos HTP 认证的 HDPE 可回收性兼具 Cyclos HTP 认证的 PP 可回收性ISO 10993-4 (溶血)ISO 10993-5 (细胞毒性)ISO 10993-10 (皮内刺激)ISO 10993-11 (急性全身毒性)欧盟法规 (EU) No 10/2011US CFR 21 FDA (原料符合性)USP <88> (生物活性试验, VI级)VDI 2017		

Thermolast® M | 热塑宝 M

Series 系列	The MC/RS series is your material solution for applications requiring basic medical approvals such as ISO 10993-5. The series is characterized by its resealing properties and its adhesion to PP and PE. The compounds are translucent and can be colored in many different ways. The compounds are produced exclusively on a special medical unit.
MC/RS	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。该系列材料具有出色的再密封特性, 可以包胶 PP 和 PE。这类化合物为半透明色, 可用多种不同方式着色。这类化合物仅由专门的医疗部门生产。

Processing Method : Extrusion, Injection Molding | **加工方法** : 挤塑, 注塑成型

Compound Name 化合物名称	Hardness 硬度	Color 颜色	Adhesion 包胶
TMxRST	30 – 40 Shore A	Translucent 半透明	PE, PP
Typical Applications	典型应用		
<ul style="list-style-type: none">ClosuresInfusion stoppersMembranes	<ul style="list-style-type: none">封口输液瓶塞薄膜		
Material Advantages	材料属性		
<ul style="list-style-type: none">Adhesion to PP, PEFree from animal ingredientsKRAIBURG TPE Medical Service PackageOptimized compression setResealingSterilizable (autoclave 134 °C, β-/γ-radiation 2x35 kGy, EtO)US DMF listedWeldable (Ultrasonic)	<ul style="list-style-type: none">包胶 PP, PE不含动物性成分凯柏胶宝®公司医疗服务包出色的压缩永久变形性能再密封可消毒灭菌 (134 °C 高压灭菌、2 x 35 kGy 伽玛辐射、环氧乙烷)美国药品主控文件 (US DMF) 认证可焊接 (超声波)		
Regulations / Approvals	法规 / 批准		
<ul style="list-style-type: none">Compatible for HDPE Recycling certified by Cyclos HTPCompatible for PP Recycling certified by Cyclos HTPISO 10993-5 (Cytotoxicity)VDI 2017	<ul style="list-style-type: none">兼具 Cyclos HTP 认证的 HDPE 可回收性兼具 Cyclos HTP 认证的 PP 可回收性ISO 10993-5 (细胞毒性)VDI 2017		

Thermolast® M | 热塑宝 M

Series 系列	The MC/tl series is your material solution for various applications requiring basic medical approvals such as ISO 10993-5. The series is characterized by its adhesion to PP and PE. The compounds are available in translucent colors and can be colored in many different ways. The compounds are produced exclusively on a special medical unit.
MC/tl	MC/tl 系列适用于基本医疗批复应用的材料解决方案, 如 ISO 10993-5。该系列可以包胶 PP, PE。这类化合物为半透明色, 可用多种不同方式着色。这类化合物是由专门的医疗部门生产。

Processing Method : Extrusion, Injection Molding | **加工方法** : 挤塑, 注塑成型

Compound Name 化合物名称	Hardness 硬度	Color 颜色	Adhesion 包胶
TMxMED	30 – 90 Shore A	Translucent 半透明	PE, PP
Typical Applications	典型应用		
<ul style="list-style-type: none">Flexible ConnectionsMembranesMouthpiecesSealsSoft touch application (e.g. handle or push button)Valves	<ul style="list-style-type: none">柔性连接器薄膜牙套密封件软触感的应用 (例如手柄或按钮)阀门		
Material Advantages	材料属性		
<ul style="list-style-type: none">Adhesion to PP, PEFree from animal ingredientsKRAIBURG TPE Medical Service PackageOptimized compression setSterilizable (autoclave 134 °C, β-/γ-radiation 2x35 kGy, EtO)US DMF listedWeldable (Ultrasonic)	<ul style="list-style-type: none">包胶 PP, PE不含动物性成分凯柏胶宝®公司医疗服务包出色的压缩永久变形性能可消毒灭菌 (134 °C 高压灭菌、2 x 35 kGy 伽玛辐射、环氧乙烷)美国药品主控文件 (US DMF) 认证可焊接 (超声波)		
Regulations / Approvals	法规 / 批准		
<ul style="list-style-type: none">Compatible for HDPE Recycling certified by Cyclos HTPCompatible for PP Recycling certified by Cyclos HTPISO 10993-4 (Hemolysis)ISO 10993-5 (Cytotoxicity)ISO 10993-10 (Intracutaneous injection)ISO 10993-11 (Acute systemic toxicity)USP <88> (Biological Reactivity, Class VI)VDI 2017	<ul style="list-style-type: none">兼具 Cyclos HTP 认证的 HDPE 可回收性兼具 Cyclos HTP 认证的 PP 可回收性ISO 10993-4 (溶血)ISO 10993-5 (细胞毒性)ISO 10993-10 (皮内刺激)ISO 10993-11 (急性全身毒性)USP <88> (生物活性试验, VI级)VDI 2017		

THERMOLAST® H | 热塑宝 H

Series 系列

HC/AD1/AP

The HC/AD1/AP series is your material solutions exclusively designed for healthcare and medical device applications in Asia Pacific. These compounds comply with ISO 10993-5 and GB/T 16886.5. They are characterized by their adhesion properties to polar thermoplastics such as PC, ABS, and PETG and are available in natural colors.

HC/AD1/AP 系列是专为亚太地区医疗保健与医疗设备应用设计的材料解决方案。该系列化合物符合 ISO 10993-5 和 GB/T 16886.5 标准。这类化合物为本色，可以包胶PC,ABS,PETG 等极性工程塑料。

Processing Method : Injection Molding | 加工方法 : 注塑成型

Compound Name	化合物名称	Hardness 硬度	Color 颜色	Adhesion 包胶
THxPGM-NTRL		30 - 80 Shore A	Natural 本色	ABS, PETG, PC

Typical Applications	典型应用
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- Function and design elements
- Flexible connections
- Membranes
- Seal
- Soft touch for grips, switches and mats
- Valves

- 功能和设计要素
- 柔性连接器
- 薄膜
- 密封件
- 手感柔软的把手，开关和垫子
- 阀门

Material Advantages

- Adhesion to PC, ABS, PC/ABS, ASA, SAN
- Adhesion to PET and PETG
- Adhesion to PS
- Colorable
- Free from animal ingredients
- Optimized mechanical properties
- Soft touch surface
- Sterilizable

材料属性

- 包胶 PC、ABS、PC/ABS、ASA、SAN
- 包胶 PET 和 PETG
- 包胶 PS
- 可染色
- 不含动物性成分
- 优异的机械特性
- 柔软的表面触感
- 可进行消毒灭菌处理

Regulations / Approvals

- GB/T 16886.5 (Cytotoxicity)
- ISO 10993-5 (Cytotoxicity)
- Regulation (EU) No. 10/2011
- US CFR 21 FDA (raw material conformity)

法规 / 批准

- GB/T 16886.5 (细胞毒性)
- ISO 10993-5 (细胞毒性)
- 欧盟法规 (EU) No 10/2011
- US CFR 21 FDA (原料符合性)

THERMOLAST® H | 热塑宝 H

Series 系列

HC/AP

The HC/AP series is a material solution designed exclusively for the healthcare and medical device market in Asia Pacific. The compounds comply with the ISO 10993-5, GB/T 16886.5 standards, as well as various global food contact and relevant medical standards. These compounds are available in a translucent color and can also be colored in a variety of colors.

HC/AP 系列是专为亚太地区医疗保健及医疗器材市场打造的 TPE 材料解决方案。此化合物符合 ISO10993-5 和 GB/T 16886.5 标准以及多项国际食品接触材料法规和相关医疗安全标准。这类化合物为半透明色，可用多种不同方式着色。

Processing Method : Extrusion, Injection Molding | 加工方法 : 挤塑, 注塑成型

Compound Name	化合物名称	Hardness 硬度	Color 颜色	Adhesion 包胶
THxOGM-LCNT		30 – 90 Shore A	Translucent 半透明	PE, PP

Typical Applications	典型应用
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- Closures
- Flexible connections
- Function & design elements
- Mouthpieces
- Seals & gaskets
- Soft touch for grips, switches & mats

- 盖子
- 柔性连接器
- 功能和设计应用
- 牙套
- 密封件和垫圈
- 触感柔软的把手、开关和防滑垫

Material Advantages

- Adhesion to PP, PE
- Colorable
- Free from animal ingredients
- Optimized compression set
- Sterilizable

材料属性

- 包胶 PP, PE
- 可预着色
- 不含动物性成分
- 出色的压缩永久变形性能
- 可进行消毒灭菌处理

Regulations / Approvals

- China GB 4806-2016
- GB/T 16886.5 (Cytotoxicity)
- ISO 10993-5 (Cytotoxicity)
- Regulation (EU) No. 10/2011
- US FDA CFR 21

法规 / 批准

- 中国国标 GB 4806-2016
- GB/T 16886.5 (细胞毒性)
- ISO 10993-5 (细胞毒性)
- 欧盟法规 (EU) No 10/2011
- US FDA CFR 21

THERMOLAST® H | 热塑宝 H

Series 系列

HC/RS/AP

The HC/RS/AP series is your material solution designed exclusively for healthcare and medical resealing applications in Asia Pacific. The compounds comply with the ISO 10993-5, GB/T 16886.5 standards, as well as various global food contact and relevant medical standards. They are also tested according to DIN ISO 15759. These compounds are available in translucent and can also be colored in a variety of colors.

HC/RS/AP 系列是专为亚太地区医疗保健及医疗器材市场打造的再密封 TPE 解决方案。此化合物符合 ISO10993-5 和 GB/T 16886.5 标准以及多项国际食品接触材料法规和相关医疗安全标准。已通过 DIN ISO 15759 测试。这类化合物为半透明色，可用多种不同方式着色。

Processing Method : Extrusion, Injection Molding | 加工方法 : 挤塑, 注塑成型

Compound Name	化合物名称	Hardness 硬度	Color 颜色	Adhesion 包胶
THxOHG-LCNT		30 – 40 Shore A	Translucent 半透明	PE, PP

Typical Applications	典型应用
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- Caps
- Closures
- Membrane
- Plugs

- 盖子
- 封口
- 薄膜
- 插头

Material Advantages

- Adhesion to PP, PE
- Colorable
- Low Density
- Resealing
- Sterilizable

材料属性

- 包胶PP,PE
- 可预着色
- 低密度
- 再密封
- 可进行消毒灭菌处理

Regulations / Approvals

- China GB 4806-2016
- GB/T 16886.5 (Cytotoxicity)
- ISO 10993-5 (Cytotoxicity)
- Regulation (EU) No. 10/2011
- US FDA CFR 21

法规 / 批准

- 中国国标 GB 4806-2016
- GB/T 16886.5 (细胞毒性)
- ISO 10993-5 (细胞毒性)
- 欧盟法规 (EU) No 10/2011
- US FDA CFR 21



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