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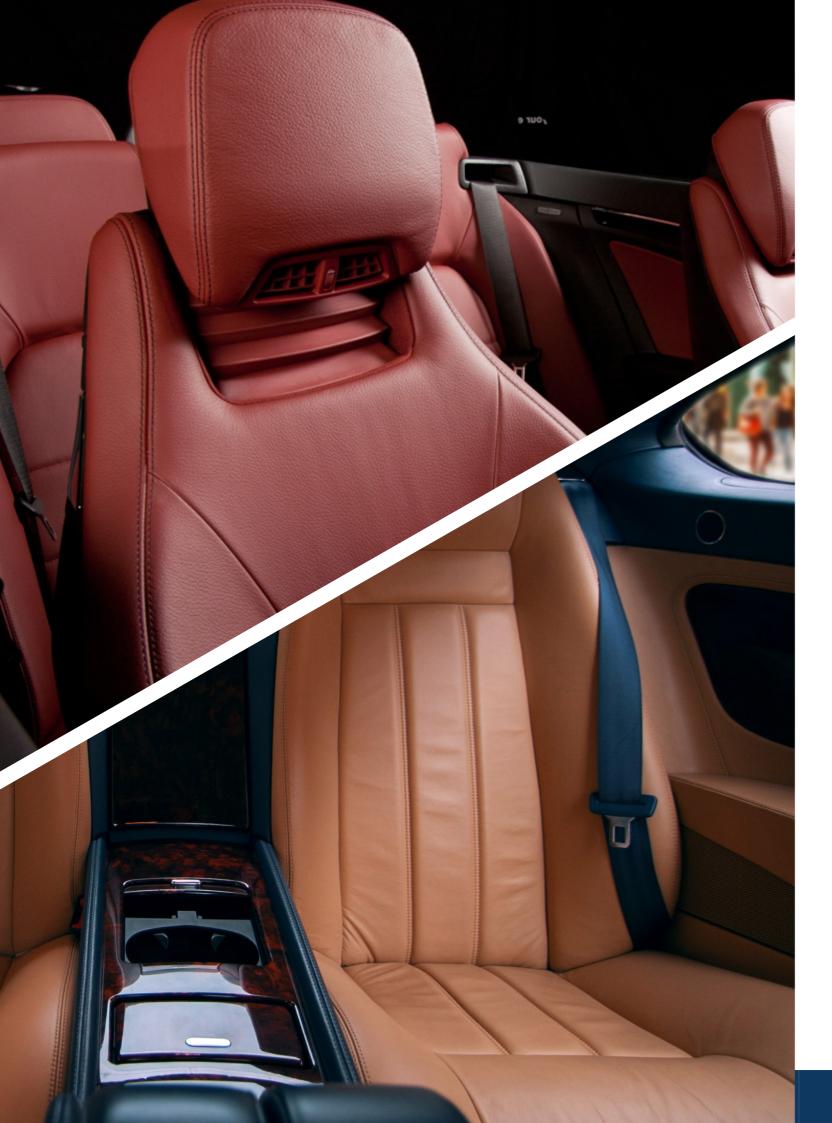
迈图高新材料集团聚氨酯添加剂指南 POLYURETHANE ADDITIVES GUIDE

硬泡、模塑和特种材料

RIGID & MOLDED FOAMS, SPECIALTY APPLICATIONS







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聚氨酯添加剂的全球引领者 A LEADER IN POLYURETHANE ADDITIVES

迈图高新材料集团("迈图")提供业内非常可靠、多元化的聚氨酯添加剂产品,为聚氨酯泡沫和制品的各个应用,提供有机硅表面活性剂、胺和锡催化剂,性能助剂等一系列产品和科学的解决方案。

Momentive Performance Materials offers one of the most trusted and diverse polyurethane additive product lines in the industry, ranging from a broad array of silicone stabilizers and a full portfolio of amine and metal-based catalysts to a selection of organic-based property modifiers.

Niax™品牌添加剂自1962年研制开发以来,是聚氨酯泡沫和制品的重要原材料,用于满足全球客户优化加工条件和提升产品性能。Niax品牌添加剂包含聚氨酯泡沫生产所需的有机硅表面活性剂、催化剂和性能助剂在内的一系列产品。

Developed in 1962, Niax brand additives have long been essential ingredients in polyurethane formulations used to meet the specialized processing and performance needs of customers across the globe. Niax grades include a comprehensive line of silicones, catalysts, and process modifiers for polyurethane foam production.

迈图作为聚氨酯添加剂的全球引领者,持续深耕聚氨酯行业,引领创新,为我们的客户提供创新的产品,专业的解决方案和更加卓越的服务。

Momentive is a pioneer in the polyurethanes additives industry, and continues to serve customers with leading innovations, creative solutions, and excellent application expertise.



聚氨酯添加剂

在硬泡、模塑和特种材料中的应用

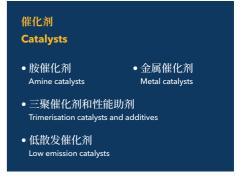
POLYURETHANE ADDITIVES

FOR RIGID, MOLDED FOAMS & SPECIALTY APPLICATIONS









硬质泡沫表面活性剂简介 NIAX SILICONE FOR RIGID FOAM GUIDE





| 产品 Product | Fine colls to the | Letific Strain Hillishing to in Polycols | Ziki Miki Hi Manifi ti Boumba agang ti Boumbana agang | Golf Stabilizer | State Williams of the state of | Vointe and only to | / 产品说明 Product Description |
|---------------|-------------------|--|---|-----------------|---|--------------------|--|
| L-6978 | 0000 | 00 | 000 | 000 | 0000 | 0000 | 特别适用于HFC-245fa及HFC-245fa-环戊烷共混及HFO冰箱体系及非连续板材, 极细的泡孔结构及低的导热系数并大幅减少泡沫的表面气泡。 For HFC-245fa and HFC-245fa co blown with Cyclopentane and HFO appliance system and discontinuous panels. Delivering very fine cells and low K factor, offering good foam surface with less voids. |
| L-6620 | 0000 | 00 | 000 | 000 | 0000 | 0000 | 极细的泡孔结构, 优异的乳化能力, 适用于HFC-245fa及HFC-245fa-环戊烷共混及HFO发泡剂体系, 用于非连续体系如冰箱, LNG等应用, 特别适用于PIR体系。 Very fine cells and excellent emulsification for HFC-245fa and HFC-245fa co blown with Cyclopentane and HFO system. For discontinuous application as appliance and LNG. Good surfactant for PIR panel system. |
| L-6866 | 0000 | 00 | 000 | 00 | 0000 | 0000 | 适用于冰箱和非连续板材,优异的导热系数并大幅减少表面空洞。 For pentane blown refrigerators and dis-continuous panels to reduce surface voids formation, while still delivering excellent K factor. |
| L-6863 | 0000 | 00 | 000 | 00 | 000 | 000 | 强成核, 在戊烷和HFC's/HCFC,HFO's发泡体系可获得细腻的泡孔,提高泡沫的稳定性,因而减少空洞的产生。 Strong nucleation, fine cells with pentane and HFC's/HCFC,HFO's, increase froth stability thus reducing voids formation. |
| L-6869 | 0000 | 000 | 000 | 00 | 0000 | 0000 | 适用于冰箱和非连续板材,提高泡沫流动性,降低导热系数,同时保持良好的戊烷相容性。 For pentane blown refrigerators and dis-continuous panels to reduce surface voids formation, while still delivering excellent K factor, good compatibility with cyclo-pentane. |
| L-6988 | 0000 | 00 | 000 | 00 | 000 | 000 | 在戊烷和HFC's/HCFC,HFO's发泡体系中可获得极细的泡孔,提高泡沫的稳定性,因而减少空洞的产生。改善酸性体系条件下硅油的储存稳定限。 Very fine cells with pentane and HFC's/HCFC,HFO's, increase froth shear stability thus reducing voids formation. Good shelf-life in acidic environment. |
| Y-16368 | 000 | 00 | 000 | 00 | 000 | 000 | 通用型硅酮表面活性剂, 良好的乳化性 -用于连续和非连续生产, 在各种发泡剂中皆可获得极细的泡孔。 General purpose with good emulsifier, fine cell with all blowing agents - continuous and discontinuous applications. |
| Y-16516 | 000 | 00 | 00 | 00 | 000 | 00 | 通用型硅酮表面活性剂,用于戊烷,HFC和HCFC发泡剂系统,和不同种类的多元醇混合物有良好的混合相溶性。 General purpose silicone for Pentane, HFC and HCFC blown system, compatible with different polyols blend Very fine cells with HFC-245fa and mixture with pentane- provide low lambda for refrigerators and discontinuous panels. |
| L-6861 | 000 | 00 | 00 | 000 | 000 | •• | 通用型硅酮表面活性剂用于戊烷, HFC's和HCFC发泡剂系统 - 和不同种类的多元醇混合物有良好的混合相溶性。 General purpose Silicone for Pentane, HFC's and HCFC blown system - compatible with different polyols blend. |
| L-6952 | 0000 | 00 | 000 | 00 | 000 | 00 | 极细的泡孔结构,特别在HFC-245fa及HFC-245fa,戊烷混合,HFO's发泡剂体系,低导热系数-用于非连续体系如冰箱应用。适用于LNG/块状泡沫应用。 Very fine cells with HFC-245fa and mixture with pentane, HFO's - provide low lambda for refrigerators and discontinuous panels. Applied for LNG/Blocks as well. |
| L-6884 | 0000 | 000 | 00 | 000 | 000 | 000 | 改善聚醚, 聚酯与戊烷的相容性, 并赋予细腻的泡孔结构。 Provide fine cells and very good polyol compatibility also with polyester polyols and pentane as blowing agent. |
| L-6970 | 00 | 0 | 000 | 000 | 0000 | 0000 | 良好的流动性、减少空洞,用于HFC或HCFC发泡的PIR/PUR复合板材和非连续板材,用于极低密度的喷涂,具有良好MDI相容性能。 Excellent flow and voids reduction PIR/PUR lamination and discontinuous panels HFC or HCFC blown, low density spray. MDI compatibility. |

POLYURETHANE ADDITIVES GUIDE A LEADER IN POLYURETHANE ADDITIVES

| 호 급 기 비비 Product | Fine cests texture | Lette (1. S. T. Markette) No. 1. S. | Ziwilithi iga Bouning Sonis Emusicasions | Constability of the Stability of the Sta | e Militaria | Poly Redumen | / 产品说明 Product Description |
|------------------------|--------------------|---|--|--|-------------|--------------|---|
| L-6900 | 000 | 0000 | 000 | 00 | 000 | 000 | 强乳化剂 - 用于连续和非连续生产,在各种发泡剂中皆可获得细腻的泡孔。 Strong emulsifier, fine cell with all blowing agents - continuous and discontinuous applications. |
| L-5440 | 00 | 000 | 00 | 000 | 000 | 0 | 用于HCFC, HFC及戊烷和水的共发泡工艺, 赋予良好的流动性和尺寸稳定性。 For HCFC but also HFC's and pentane co-blown with water, for all applications, good flow and dimensional stability. |
| Y-16518 | 00 | 000 | 00 | 0000 | 0000 | • | 具有良好聚醚相容性能,良好的流动性和尺寸稳定性,用于HFC's及HCFC141b发泡的PUR非连续体系。 Good solubility with polyols - good flow and dimensional stability - suitable for HFC's and HCFC141b blown. |
| L-6124 | 0000 | 00 | 00 | 00 | 000 | 000 | 良好的尺寸稳定性及流动性,减少表面气孔,细腻的泡孔结构和优异的导热性能;适用于家电,LNG,及用戊烷或HFO发泡的连续板等应用。 Good foam stabilization with good flow, surface voids reduction, fine cell structure with excellent thermal conductivity performance; suitable for appliance, LNG and continuous lamination with c-P or HFO systems. |
| Y-16248 | 0000 | 00 | 000 | 000 | 0000 | 0000 | 能够显著减少表面气泡, 提供极好的体系相容性和极好的流动性能。可使用于HCFC, 戊烷, 和HFC发泡的PUR和PIR泡沫中。 It can significantly reduce surface voids, deliver good system compatibility and good flow-ability. It may be used for HCFC, hydrocarbons and HFC blown PUR and PIR foams. |
| L-6638 | 00 | 000 | 000 | 000 | 0000 | 0000 | 减少表面空洞,改善泡沫表观极佳的硅酮表面活性剂,适用于金属面复合夹心板材PUR和PIR泡沫,具有良好聚醚相容性能。 Premium grade silicone to reduce voids formation and achieve best surface quality in metal faced panels PUR and PIR, good polyol compatibility. |
| L-5420 | 00 | 00 | 000 | 0000 | 00 | 00 | 用于HCFC和HFC/戊烷与水的共发泡工艺,赋予良好尺寸稳定性和阻燃性,适用于各类硬泡应用。 For HCFC but also HFC's and pentane co-blown with water, for all applications, good dimensional stability and improved FR. |
| L-6100 | 0 | 00 | 00 | 0000 | • | 00 | 用于戊烷或HFC与水的共发泡工艺,赋予良好的流动性,尺寸稳定性和阻燃性,适用于复合板材和喷涂泡沫。 Pentane or HFC's co-blown water blown foam, good flow and dimensional stability, lamination and spray. |
| L-5345 | 00 | 00 | 0000 | 000 | 000 | 00 | 1K/OCF泡沫, 良好乳化性, 用于仿木, 板材, 块状泡沫和酚醛泡沫, 也可适用于甲酸甲酯发泡剂。 1K/OCF foam, good emulsification, also for structural foam, panels, blocks, and phenolic foams, suitable for methyl-formate blowing agent. |
| L-5348 | 00 | • | 000 | 000 | 000 | | 1K/OCF泡沫, 无HFC, 高泡沫量, 良好的相容性和存储稳定性。 1K/OCF foam, for HFC free, high froth volume, good compatibilization, excellent storage stability. |
| L-5388 | 00 | • | 000 | 000 | 000 | | 1K/OCF发泡,无HFC,能够适用于高含量的低极性填料。使用于开孔或者包装泡沫。 1K/OCF foam, also HFC free - high low polar fillers loading. Open cell and packaging. |
| L-5356 | 000 | 0000 | 0000 | 000 | 000 | 00 | 1K/OCF发泡, 无HFC, 改善低温条件下发泡泡沫质量, 兼顾细腻并开孔泡孔结构。 1K/OCF foam, can improve foaming at low temperature and without HFC's. |
| L-6164 | 00 | | 00 | 0000 | 00 | | 同时具有整泡性和开孔性硅油,非常有效的开孔硅油,在OCF/1K及其他体系中,赋予高开孔率,提高尺寸稳定性和阻燃性。 Cell opener, cell regulator - very efficient cell opener, OCF/1K and systems, dimensional stability and FR. |
| L-6186/8/9 | 000 | | 00 | 0000 | 00 | | 适用于低至高密度开孔的硬泡,在过填充,高异氰酸酯指数条件下亦有较好效果,适用于聚醚和聚酯多元醇体系,相对于传统开孔剂有较好的体系兼容性。 Good for Low to high density Open cells rigid foam - also efficient in overpacked conditions and high index polyether and polyester based. Provide better polyol compatibility compared to traditional cell opener. |
| L-6168 | 000 | • | 000 | 000 | 00 | 00 | 有好的泡沫稳定性和开孔平衡,用于极低密度的喷涂和包装开孔泡沫。 Packaging foam, low density spray open cells, good balance froth stabilization and cell opening compatibility compared to traditional cell opener. |

Feature 性能: Strong 很好/很强 = 🔾 🔾 🔾 🔾 Moderate 中等 = 🔘

¹K = OCF 单组分泡沫, moisture cure one component foam 湿气固化单组分泡沫 HFC = hydro Fluoro Carbon 氢氟碳 / HCFC = Hydro Chloro Fluoro Carbon 氢氯氟碳 / PIR = Polyisocyanurate 聚异氰尿酸酯 / PUR = Polyurethane 聚氨酯 / 1K/OCF = One component foam 单组分泡沫



硬质泡沫NIAX RIGID FOAMS



Niax有机硅和物理发泡剂在聚氨酯硬泡组合料中的相容性指南

Relative Scale of Niax Silicone Contribution to Blowing Agent Solubility in Rigid Foam System Applications







| 产品 Catalysts | Pun discontin | Haninario, continuit IX | # Alt | A PIR 18 | ************************************** | Mr foam 但类,开孔位数 Packagin | 产品说明 Product Description |
|-----------------|---------------|-------------------------|---|----------|--|--------------------------------|---|
| A-1 | 0 | 0 | 0 | 0 | 0 | 0 | 高效的发泡催化剂,选择性的促进水-NCO反应,改善泡沫流动性和膨胀速率。 Very effective blowing catalyst, promote selectively water-NCO reactions, improve foam flow and rate of expansion. |
| C-5 | 0 | 0 | | • | | | PMDETA, 一般用途发泡催化剂。 PMDETA general purpose blowing catalyst. |
| C-8 | 0 | 0 | 0 | | 0 | 0 | 标准PUR中等凝胶催化剂, N,N二甲基环己胺。 DMCHA general purpose PUR catalyst. |
| C-10LV | | | | | • | • | 低气味反应型胺类催化剂, 发泡比DMEA强。 Low odour, reactive amine catalyst, more blowing than DMEA. |
| C-15 | | | | | | 0 | 低气味, 高性价比, 反应性发泡凝胶平衡催化剂。 Low odour, cost effective reactive balanced blow/gel catalyst. |
| C-31 | | • | • | • | | | 高性价比, 延迟型反应性凝胶催化剂, 提高PUR或PIR泡沫的表皮熟化。 Cost effective, delay action gel catalyst for improving the surface curing for PUR and PIR foams. |
| C-32 | | • | • | • | | | 延迟型胺类催化剂,适用于家电体系加速表皮熟化以及快速脱模。 Delay action amine catalyst for improving foam hardness and faster demould for appliance. |
| C-41 | 0 | 0 | 0 | | | | 促进交联反应,提高泡沫初始强度,降低脱模时间,改善泡沫 粘结性。 Promotes efficiently crosslink reactions, increases green strength, reduces demold time, improves adhesion. |
| BDMA | 0 | 0 | 0 | | • | 0 | 二甲基苄基胺,弱的凝胶催化剂,减少表面的脆性,增加泡沫的粘附性,特别是对于水发泡体系。 Dimethylbenzylamine, weak gel catalyst, reduce surface friability and improve foam adhesion in particular in foams mainly water blown. |
| DMEA | 0 | 0 | | | | | 稍有气味,低成本的活性催化剂。 Moderate odour, cost effective reactive catalyst. |
| DMEE | 0 | | • | | • | 0 | 稍有气味,低成本的活性催化剂。与DMEA相比,发泡效率更高。 Moderate odour, cost effective reactive catalyst, more blowing efficiency compared to DMEA. |
| DMDEE | • | | 0 | | | 0 | 用于单组分喷涂泡沫,中活发泡催化剂,对于1K/OCF的异氰酸酯和预聚体混合物,提供极佳储藏稳定性。 Moderate activity blow catalyst, excellent storage stability also in isocyanate and prepolymers, 1K/OCF foams. |
| A-107 | • | | 0 | | 0 | 0 | 一般用途延迟发泡催化剂, 控止反应活性, 提高存储稳定性。 General purpose delayed action blow catalyst, control reactivity, enhance shelf life. |
| A-300 | • | | • | | • | • | 一般用途延迟凝胶催化剂, 控止反应活性, 提高存储稳定性。 General purpose delayed action gel vatalyst, control reactivity, enhance shelf life. |

LEGENDS

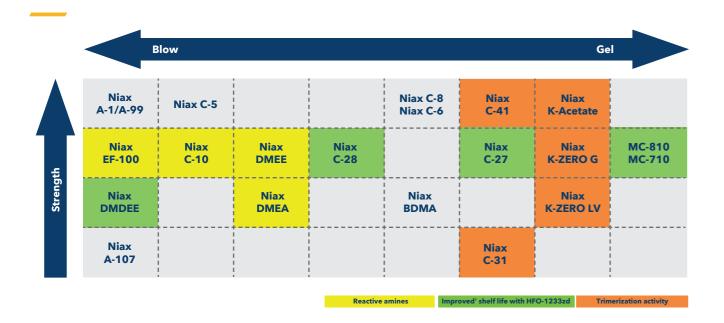
HFC = hydro Fluoro Carbon 氢氟碳 / HCFC = Hydro Chloro Fluoro Carbon 氢氯氟碳 / PIR = Polyisocyanurate 聚异氰尿酸酯 / PUR = Polyurethane 聚氨酯 / 1K/OCF = One component foam 单组分泡沫

A LEADER IN POLYURETHANE ADDITIVES 13

| 产品 Catalysts | PUR discontin | Agenon. | PIR ALEST PLIP PIR ALEST PLIP Panels Survey | 「 | A 表述PD (A A) PR (A) A) A A A A A A A A A A A A A A A A | 产品说明 学品说明 Product Description |
|-----------------------------|---------------|---------|---|---|--|---|
| Potassium Octoate LV | | • | | • | | 含有15%钾的PIR催化剂,可直接计量(2500 cps),也可作为普通用途的PUR固化催化剂。 15% K containing PIR catalyst suitable for direct metering (2500 cps), also good as general purpose curing catalyst in PUR. |
| Potassium Octoate | 0 | | | • | | 含有15%钾的PIR催化剂 , 也可作为普通用途的PUR的固化催化剂。 15% K containing PIR catalyst, also good as general purpose curing catalyst in PUR. |
| Potassium Acetate | • | • | • | • | 0 | 含有15%钾的PIR催化剂,也可作为普通用途的PUR的固化催化剂。 15% K containing PIR catalyst, also good as general purpose curing catalyst in PUR. |
| K-Zero G | • | • | • | • | • | 非醇类的15%钾的PIR催化剂, 3000cPs黏度。 Glycol free Potassium Octoate, 15% Potassium, 3000 cPs viscosity PIR catalyst. |
| LC-5622 | | | | | 0 | 适用于聚氨酯泡沫的有机锡催化剂,在含水组合料储存时间长。 Tin catalyst used in PU foams (including spray), long shelf life in blended system containing water. |
| Niax 工艺添 Niax Processing | | | | | | 产品说明 Product Description |
| RA-1 | | • | • | | | 在不影响凝胶凝时间的同时,能加速泡沫的硬度和黏附性,该添加剂特别适用于与芳香族聚酯多元醇酯一起制备PIR泡沫工艺。Can speed up foam hardening and adhesion without influencing gelation time, in particular for PIR foam made with aromatic polyester polyols. |
| AP-01/AP-04 | 0 | 0 | 0 | 0 | 0 | 面料黏接力添加剂。 Adhesion promoter additives. |

硬质泡沫催化剂简介

Summary Table of Niax Catalyst for Rigid Foam





NIAX 模塑高回弹有机硅表面活性剂 NIAX SILICONE SURFACTANTS FOR HR MOLDED FOAM



| Niax 有机硅 Niax Silicone | HR TDI | HR TM | HR MT | HR MDI | VE MDI | 产品说明 Product Description, Potential Applications and Typical Benefits |
|---------------------------|--------|-------|-------|--------|--------|--|
| L-3001 | | | 0 | • | | 高效开孔表面活性剂 High cell opening silicone |
| L-3002J | | | 0 | • | | 中等效率的开孔表面活性剂,不含甲苯 Medium cell opening silicone, toluene free |
| L-3004 | | | • | 0 | | 高效开孔表面活性剂,低有效氧离子含量,更强的储存稳定性能 High cell opening efficiency silicone, low active oxygen content and longer storage stability |
| L-3415 | | | • | • | | 低散发表面活性剂, 高效开孔 Low emission silicone with high cell opening |
| L-3627(J) | | | • | • | | 低散发表面活性剂,中等效率开孔 Low emission silicone, medium cell opening |
| L-3628J | | | 0 | 0 | | 低散发表面活性剂, 低气味, 中等效率开孔, 不含甲苯 Low emission silicone, low odor, medium cell opening, toluene free |
| L-3629J | • | • | | | | 低散发表面活性剂, 高效能平衡型表面活性剂 Low emission, high efficiency balanced silicone |
| L-3636LF | | • | • | | | 超低散发表面活性剂,低气味,高活性,用于TM或者MT混合技术 Very low emission, high potency silicone, low odor |
| L-3639LF | | | 0 | • | | 超低散发表面活性剂,中等效率开孔,低气味 Very low emission, medium cell opening silicone, low odor |
| L-3641LF | | 0 | | | | 低凝固点, 低雾化表面活性剂, 低气味, 中等稳泡性能 Low freezing point, low emission and low odor silicone, medium stability |
| L-3646J | 0 | 0 | | | | 高效能平衡型表面活性剂,不含甲苯,改善泡沫的共振性能 High efficiency balanced silicone, toluene free, improve resonance ability |



| Niax 有机硅 Niax Silicone | HR TDI | HR TM | HR MT | HR MDI | VE MDI | 产品说明 Product Description, Potential Applications and Typical Benefits |
|---------------------------|--------|-------|-------|--------|--------|---|
| L-3682 | | | • | • | | 超低气味, 低散发表面活性剂, 不含苯系物, 中等效率开孔 Ultra-low odor, low emission silicone, BETXs free, medium cell opening |
| L-3686 | | • | • | | | 超低气味, 低散发表面活性剂, 不含苯系物, 中等稳泡性能 Ultra-low odor, low emission silicone, BETXs free, medium stablity |
| L-3881 | | | | | • | 低散发, 稳泡型表面活性剂, 可与L-3639LF共同用于模塑慢回弹应用领域 Stabilizing low emission silicone for viso-elastic foams, co-surfactant together with L-3639LF |
| L-5309J | 0 | • | | | | 高效能平衡型表面活性剂, 不含甲苯 High efficiency balanced silicone, toluene free |
| Y-10366J | • | • | | | | 高效稳泡型表面活性剂, 不含甲苯 High efficiency balanced silicone, toluene free |
| Y-16500 | 0 | • | | | | 低散发,高效稳泡型表面活性剂,帮助改善物料的流动性,减少泡沫制品的空洞缺陷 Low emission, high efficiency balanced silicone, provide excellent flowability and less voids |

 HR = 高回弹
 TDI = 甲苯二异氰酸酯

 VE = 慢回弹
 MDI = 二苯基甲烷二异氰酸酯

 BETXs = 苯, 乙苯, 甲苯, 二甲苯, 苯乙烯

TM = TDI/MDI混合体系且TDI占比较高 MT= MDI/TDI混合体系且MDI占比较高

POLYURETHANE ADDITIVES GUIDE A LEADER IN POLYURETHANE ADDITIVES 17



| Niax 催化剂 Niax Catalyst | 吹发 Blow | 平衡 Balanced | 凝胶 Gel | 延迟反应 Delayed Action | 低散发 Low Emission | 产品说明 Product Description, Potential Applications and Typical Benefits |
|---------------------------|------------|----------------|-----------|---------------------------|------------------------|---|
| A-1 | 0 | | | | | 工业标准吹发催化剂 Industry standard blow catalyst |
| A-107 | 0 | | | 0 | | 工业标准延迟反应的吹发催化剂 Industry standard delayed action blow catalyst |
| A-400 | 0 | | | 0 | | 开孔发泡催化剂, 延迟发泡反应(TDI体系), 提高流动性 (MDI体系) (低腐蚀性) Delayed action load building (TDI), cell opening blow catalyst, improved flowability (MDI) (low corrosion) |
| A-450 | 0 | | | 0 | | 开孔发泡催化剂, 延迟发泡反应(TDI体系), 提高流动性 (MDI体系) Delayed action load building (TDI), cell opening blow catalyst, improved flowability (MDI) |
| A-4 | • | | | | | 改善表面固化催化剂 Low staining catalyst that can improve surface cure |
| C-15 | | • | | | • | 低散发, 高效平衡型叔胺催化剂, 凝胶为主 Low emission, balanced amine catalys, predominately gel, high efficiency |
| C-174 | 0 | | | | | 适用于MDI体系的发泡催化剂 HR MDI blow catalyst |
| C-225 | | • | | 0 | | 平衡型催化剂,具有延迟前端乳白反应,并加速泡绵后熟化功效的催化剂 Balanced delayed action catalyst with enhanced curing |
| A-338 | | • | | • | | 叔胺催化剂, 有效降低模塑泡沫的模具温度, 改善表皮熟化 Tertiary amine catalyst that can help to improve skin cure at low mold temperatures |
| A-33 | | | 0 | | | 工业标准的凝胶催化剂 Industry standard gel catalyst |
| A-300 | | | 0 | • | | 延迟反应, 开孔型凝胶催化剂 (低腐蚀性) Delayed action load building, cell opening gel catalyst (low corrosion) |
| EF-150 | 0 | | | 0 | 0 | 具有延迟效果,低散发,反应型发泡催化剂 Delayed action reactive low emission blow catalyst |
| EF-600 | | 0 | 0 | | 0 | 低气味,低散发,平衡型催化剂,凝胶为主 Low odor, low emission,balanced catalyst, predominantly gel |
| EF-680 | | | 0 | | 0 | 高催化效率, 低气味, 低散发, 凝胶催化剂, 能加速泡沫熟化速度 High catalyzing efficiency gel catalyst with low odor and low emission property that can improve end curing |

HR = 高回弹 TDI = 甲苯二异氰酸酯 MDI = 二苯基甲烷二异氰酸酯



聚氨酯鞋底 机械泡沫及皮革有机硅表面活性剂 NIAX SILICONE FOR PU SHOE SOLE, MECHANICAL FROTH AND PU LEATHER

| Niax 有机硅 Niax Silicone | Microcellular (Polyether) Microcellular (Polyether) Microcellular (Polyecter) | 产品说明 Product Description |
|---------------------------|---|--|
| L-1500 | • | 聚氨酯鞋底的工业标准表面活性剂。 surfactant for microcellular systems. |
| L-1501 | 0 | 高效开孔的聚氨酯鞋底表面活性剂。 Low efficiency with excellent opencell for microcellular systems. |
| L-1506 | 0 0 | 低密度聚酯或聚醚体系的有机硅表面活性剂。 Surfactant developed for low density polyester and polyether-based microcellular systems. |
| L-1507 | 0 0 | 适用于低密度聚酯或聚醚型聚氨酯鞋底的有机硅表面活性剂,乳化效果好。 Surfactant developed for low-density polyester-based or polyether-based microcellular systems with excellent emulsification. |
| L-1541 | 0 | 适用于高密度聚氨酯鞋底的有机硅表面活性剂, 具有很强稳定性和很厚实的结皮。 Strong stabilizing surfactant developed for high-density polyester-based microcellular systems with thick skin. |
| L-1568 | 0 | 适用于141b和水共发泡的低密度聚氨酯鞋底的有机硅表面活性剂, 具有很好的尺寸稳定性和光滑的结皮。 Good dimenstional stability surfactant developed for 141b/H2O co- blown low density polyester-based microcellular systems with fine skin. |
| L-5302 | • | 适用于中高密度聚醚型聚氨酯鞋底的有机硅表面活性剂,具有中等稳定性。 Medium stabilizing surfactant developed for high-density polyether- based microcellular systems. |
| L-5614 | | 机械沫状泡沫的工业标准表面活性剂。 Industry-standard surfactant used in the mechanically frothed foam process. |
| L-5617 | | 机械沫状泡沫的工业标准表面活性剂, 更耐水解, 低VOC。 Low VOC and hydrolyzable stability surfactant analog of L-5614 used in the mechanically frothed foam process. |
| L-5639 | | 低VOC耐水解的闭孔型机械沫状泡沫表面活性剂, 可有效降低泡沫密度和减少因高剪切力造成的泡沫塌陷。 A low VOC mechanical froth surfactant, non-hydrolysable, provides high closed cell content while reducing both froth density and shear induced cell collapse. |

特种材料

NIAX SPECIALTIES APPLICATIONS

聚氨酯涂料、粘合剂、密封剂和弹性体(CASE)
POLYURETHANE COATINGS, ADHESIVES, SEALANTS AND ELASTOMERS (CASE)

| Niax 有机硅 Niax Silicone | Mirrocollular (Polyester) PUSEN PUSEN | PU 给服 PU leather | 产品说明 Product Description |
|---------------------------|---------------------------------------|---------------------|---|
| L-5641 | | | 耐水解低VOC的表面活性剂, 有更强的稳泡性和更高的闭孔率, 用于低密度机械沫状泡沫。 Non-hydrolyzable, reduced VOC surfactant providing improved stabilization and increased closed cell content for low density mechanical froth appplications. |
| Y-16415 | • | 0 | 表面张力低,用于干式PU涂层,对微孔基材有很好的渗透力,具有优异的润湿、铺展效果,同时能改善流平性,稳定于pH值4-10。 Low surface tension silicone for Dry process PU Leather Coating, stable in pH 4-10, provides excellent wetting, leveling and dispersion. |
| L-1131 | | • | 稳泡剂,能显著增加合成革的厚度和丰满度,加快DMF与水的交换速度。 Cell Stabilizer for Wet Process PU Leather, provides good deposition, increases thickness, speeds up DMFand water exchange. |
| L-1133 | | • | 稳泡剂,调整细长的整齐有序的泡孔,提高脱DMF速度。 Cell Stabilizer for Wet Process PU Leather, Promotes samll-long longitude and orderly cells, improve the speed of Doffing DMF and surface leveling of Base. |
| L-1143 | 0 | • | 提供绵滑手感, 同时具有良好的流平、抗粘和分散效果, 增加表面光泽。 Provides wet and soft smooth hand feeling, improves flow leveling and dispersion. Suitable for dry process PU Leather coating. |
| Y-16319 | | • | 能产生大小适中的均匀泡孔,具有良好的综合效果,是一种在行业内被广泛使用的经典泡孔调节剂。 Industry Standard cell stabilizer, provides uniform medium cell structure in wet process PU leather. |
| L-1160 | 0 | • | 亲水性聚醚封端, 抗粘性极佳, 与聚氨酯有良好的相容性, 可反应改性。 Contains hydrophilic polyether pendant ends for wet and dry process, enhance anti-sticking property, good solubility in PU system. |
| L-1169 | • | 0 | 亲水性聚醚封端, 流平性极佳, 良好的抗粘性, 并能提供滑爽手感, 可反应改性。 Contains hydrophilic polyether pendant ends for dry and wet process, enhance anti-sticking property, good leveling, and silky hand feeling. |

聚氨酯特种材料催化剂 NIAX CATALYSTS FOR PU SPECIALTIES





| Niax催化剂 Niax Catalysts | Sem Composite | Mechanical From | Fill Hill Hill Hill Hill Hill Hill Hill | Hittilitik | PUSTR WISKY | Mitt. Kit. Kit. Kit. Kit. Kit. Kit. Kit. | 产品说明 Product Descritpion, Potential Applications and Typical Benefits |
|---------------------------|---------------|-----------------|---|------------|-------------|--|---|
| A-450 | | 0 | | | | 0 | 延迟的发泡胺催化剂,用于开模浇注的微孔泡沫,帮助开孔。 Delayed-action, blowing-selctive amine catalyst developed for microcellular foam applications. |
| A-533 | | | 0 | 0 | | • | 凝胶催化剂,专用于微孔泡沫和弹性体体系。 Industry standard TEDA-based catalyst used in elastomers and microcellular foam. |
| A-534 | | • | • | • | | • | 延迟的复合胺催化剂, 帮助快速脱模, 能改善泡沫在模具内的流动性。 Delayed-action amine catalyst, fast demold and improve foam flowability. |
| A-575 | • | | • | | | | 延迟的DBU基强凝胶催化剂,用于高密度的SRIM和浇注弹性体体系。 Delayed-action, powerful, gelling-selctive amine catalyst developed for high-density SRIM and cast elastomer systems. |
| A-577 | • | | • | • | | • | 延迟的DBU基强凝胶催化剂,用于低密度的SRIM和浇注弹性体体系。 Delayed-action, powerful, gelling-selctive amine catalyst developed for low-density SRIM and cast elastomer systems. |
| LC-5628 | | | • | | 0 | | 适用于聚氨酯弹性体(包括喷涂)和涂料的高活性有机锡催化剂。 High efficient tin catalyst, used in Elastomer (including spray) and coating systems. |
| LC-5604 | | | • | | | | 广泛应用于聚氨酯泡沫、弹性体、胶黏剂、密封胶和室温固化有机硅的有机锡催化剂。 Industry standard Tin catalyst for PU foams, Elastomer, Adhesive, and RTV silicone. |
| LC-5638 | | | 0 | | | | 适用于聚氨酯弹性体的有机锡催化剂。 Tin catalyst used in PU Elastomers. |
| LC-5622 | | | | | | | 适用于聚氨酯泡沫的有机锡催化剂,在含水组合料储存时间长。 Tin catalyst used in PU foams (including spray),long shelf life in blended system containing water. |
| LC-5632 | • | | 0 | 0 | | 0 | 适用于聚氨酯微孔泡沫和弹性体的有机锡催化剂,极高的水解稳定性。 Tin catalyst used in PU microcellular foam and Elastomer with high hydrolyzable stability. |
| LC-5654 | | | | | 0 | 0 | 适用于聚氨酯微孔泡沫的有机锡催化剂,具有延迟作用,不含三丁基锡、二辛基锡和三辛基锡。 Delayed-action Tin catalyst used in PU microcellular foam, zero contain of TBT, DOT and TOT. |
| LC-5629 | • | 0 | • | • | | • | 适用于大多数聚氨酯泡沫的有机锡催化剂, 具有很强的延迟效果, 耐水解性较好。 Delayed-action Tin catalyst, used in most of PU foams, especially microcellular and mechanically frothed foam, good hydrolyzable stabilit. |
| LC-5615NT | | • | | | | | 用于机械沫状发泡工艺的热敏型金属镍催化剂。 Heat-activated Nickel catalyst developed for the mechanically frothed foam application. |
| LC-5630 | | 0 | | | | | 用于机械沫状发泡工艺的热敏型金属镍催化剂。 Heat-activated Nickel catalyst developed for the mechanically frothed foam application. |



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