

聚耐美天冬聚脲防腐涂料

技术说明书



聚耐美|天冬纯聚脲

JUNAIMEI NEW MATERIALS | POLYASPARTIC POLYUREA ANTICORROSION COATING

产品概述

聚耐美天冬聚脲防腐涂料是高性能天冬聚脲保护膜，适用于混凝土、钢结构、玻璃钢及砖石等多种基材，可形成高硬度、耐紫外线、耐磨、耐冲击及耐化学腐蚀的连续保护层。

Junaimei Polyaspartic Polyurea Anti-Corrosion Coating is a high-performance protective membrane for substrates including concrete, steel structures, fiberglass-reinforced plastic (FRP) and masonry. It forms a continuous protective layer with high hardness and resistance to UV exposure, abrasion, impact and chemical corrosion.

核心特性

1. 高硬度。
2. 耐紫外线。
3. 耐磨抗冲击。
4. 耐化学腐蚀。
5. 高强韧性。

High hardness; UV resistance; abrasion and impact resistance; chemical corrosion resistance; high strength and toughness.

适用范围

1. 新的或现有混凝土表面、钢结构、玻璃钢或砖石结构。
2. 金属屋面、外墙的防水及防腐保护。
3. 工业地坪、仓库地坪、机库甲板、运动场、阳台及走廊等区域。
4. 环氧树脂地坪、金刚砂或自流平地坪的翻新工程。
5. 景观池、游乐场玻璃钢滑梯、玻璃钢船体、玻璃钢雕塑，以及景观水池或工业水池内衬。
6. 作为泡沫雕塑或聚脲膜的面漆。
7. 暴露在阳光直射下的区域。

New or existing concrete surfaces, steel structures, FRP or masonry structures; waterproofing and anti-corrosion protection for metal roofs and exterior walls; industrial and warehouse floors, hangar decks, sports grounds, balconies and corridors; refurbishment of epoxy resin, emery or self-levelling flooring; landscape ponds, FRP slides, FRP hulls and sculptures, and linings for landscape or industrial pools; use as a topcoat for foam sculptures or polyurea membranes; areas exposed to direct sunlight.

产品优点

1. 耐紫外线老化，防水及防腐蚀性能优异。
2. 对海水、氯、碱和稀酸具有出色耐受性。
3. 抗冲击、耐磨，形成高硬度耐磨涂层。
4. 附着力出色，高温下物理性能稳定。
5. 低温下仍保持韧性。
6. 提供无缝、无接口的连续保护。
7. 适用于多种基材，施工简便。
8. 不会显著增加承重结构荷载。

Resistant to UV ageing, with excellent waterproofing and anti-corrosion performance; excellent resistance to seawater, chlorine, alkalis and dilute acids; impact- and abrasion-resistant, forming a high-hardness wear-resistant coating; excellent adhesion, with stable physical properties at high temperatures; retains toughness at low temperatures; provides seamless, joint-free continuous protection; suitable for a range of substrates and easy to apply; does not significantly increase the load on load-bearing structures.

关键施工数据

项目	参数
施工温度 / Application temperature	+5°C to +35°C
混合料使用时间 / Pot life	约30分钟 / Approx. 30 min
关键层间窗口 / Critical intercoat window	底漆后12-24 h; 聚脲后4 h Primer 12-24 h; polyurea 4 h

基材准备

- 通用处理：根据基材材质采用喷砂、抛丸、打磨或打凿等方式处理，并使用合适底漆进行初步封闭。基面须清洁、坚实且干燥。
- 混凝土 / 水泥砂浆：基材应充分固化、干燥、无空鼓、粉化、灰尘、油污及松散物；清除油脂、油漆和蜡，去除凸起与浮浆，并修补孔隙及砂眼。建议：环境+5°C至+35°C；基材抗压强度 ≥ 25 MPa，拉拔强度 ≥ 1.5 MPa。
- 碳钢基材：彻底除去成型油、金属屑及焊渣等杂质，喷砂至Sa 2½-Sa 3.0，表面粗糙度 >50 μm 。喷砂后应立即施涂底漆，若再次氧化须重新喷砂。
- 瓷砖及后续施工：釉面瓷砖无需预先打磨，但须确保基面清洁、干燥。底漆干固后12-24小时内进行施工。作为聚脲面漆时应在聚脲施工后4小时内涂覆。

General preparation: prepare by abrasive or shot blasting, grinding, chiselling or another suitable method, then seal initially with an appropriate primer; the substrate must be clean, sound and dry; concrete or cement mortar: the substrate must be fully cured and dry, free from hollow areas, powdering, dust, oil and loose material; remove grease, paint, wax, projections and laitance and repair pores and bugholes; recommended conditions are +5°C to +35°C, compressive strength ≥ 25 MPa and pull-off strength ≥ 1.5 MPa; carbon steel: remove forming oil, metal swarf, welding slag and other contaminants; abrasive-blast to Sa 2½-Sa 3.0 with a surface profile above 50 μm ; prime immediately and reblast if oxidation recurs; tiles and subsequent application: glazed tiles require no preliminary grinding but must be clean and dry; apply within 12-24 hours after the primer has dried, or within 4 hours after polyurea application when used as a polyurea topcoat.

施工说明（一）

底漆指引

基材	推荐配套
混凝土 / 水泥 / Concrete / Cement	环氧渗透底涂 / Penetrating epoxy primer
碳钢 / Carbon steel	环氧富锌底漆 / Zinc-rich epoxy primer
聚脲系统 / Polyurea system	单组分聚脲底涂 / Single-component polyurea primer

混合

使用前以低速（300-400转/分钟）电动搅拌器充分搅拌A、B组分3分钟；随后倒入新的干净容器，继续低速搅拌约2分钟至均匀。切勿刮入容器四边或底部未充分混合的物料，以免影响饰面。每次配料应在30分钟内用完，混合后立即倒在基材上施工。

Before use, mix Parts A and B for 3 minutes with a low-speed mixer at 300-400 rpm. Transfer to a new clean container and mix for about 2 more minutes until uniform. Do not scrape insufficiently mixed material from the sides or bottom into the batch. Use within 30 minutes and pour onto the substrate immediately after mixing.

施用（步骤1-2）

1. 混合好的涂料须在30分钟内使用完。产品适用于手涂及喷涂冷施工，无需专门的热喷涂设备。
2. 手涂时，用刷子或滚筒在准备好的基材上均匀施涂1层。第一道涂层干固后即可施涂第二道（通常隔日，最长不超过24小时）。施工前须确保前一道涂层表面清洁无尘；各道涂层方向应相互垂直。

Use the mixed coating within 30 minutes; it is suitable for manual and cold spray application and heated spray equipment is not required; for manual application, apply one uniform coat by brush or roller; apply the second coat after the first has dried, normally the next day and no later than 24 hours; keep the preceding coat clean and dust-free and apply successive coats in perpendicular directions.

施用（步骤3-5）

3. 用于承受中度荷载的地坪时，可在首道涂层未干时抛撒0.3-0.6 mm石英砂（或按系统要求选粒径），第二道施工前清除未牢固黏附的砂砾。重度荷载区域建议采用三重涂层系统，前两道均抛撒石英砂，最后施工面层。
4. 作为聚脲面漆时，无需预先施涂底漆或打磨聚脲膜基面，但应在聚脲施工后4小时内施涂。
5. 特定翻新场景（如水上乐园造浪池）：先打磨旧涂层，再施涂环氧底漆，最后按设计厚度涂覆新的天冬聚脲涂料。

For medium-load floors, broadcast 0.3-0.6 mm quartz sand into the wet first coat, or use the system-specified grade, and remove loose aggregate before the second coat; for heavy loads, use a three-coat system with quartz sand in the first two coats and a final finish coat; when used over polyurea, no preliminary primer or grinding is required; apply within 4 hours after polyurea application; for specific refurbishment work such as a water-park wave pool, grind the existing coating, apply an epoxy primer, then apply the new polyaspartic polyurea coating to the specified thickness.

技术参数（典型特性）

项目 / Item	典型值 / Typical Value
固含量（按重量） / Solids content by weight	95%
黏度 / Viscosity	A组分：约1000 mPa·s；B组分：约2000 mPa·s Part A: approx. 1000 mPa·s; Part B: approx. 2000 mPa·s
硬度 / Hardness	Shore A = 95
黏结强度 / Bond strength	混凝土（已涂底漆）≥3.5 MPa；钢铁（已涂底漆）≥12.2 MPa Concrete (primed) ≥3.5 MPa; steel (primed) ≥12.2 MPa
吸水率；浸水7天，ASTM D570 / Water absorption; 7-day immersion, ASTM D570	<0.2%
水蒸气渗透率；膜厚1 mm / Water-vapour permeability; 1 mm film	3.1 Perms
断裂伸长率 / Elongation at break	≥300%
抗拉强度；+24°C, R.H. 50% / Tensile strength; +24°C, R.H. 50%	10-15 MPa
撕裂强度 / Tear strength	60 kN/m
耐磨强度；Taber CS-17, 1000周期, 1000 g / Abrasion resistance; Taber CS-17, 1,000 cycles, 1,000 g	≤0.09 mg
耐冲击强度；>60 kg落锤冲击 / Impact resistance; >60 kg falling-weight impact	通过 / Pass

技术参数（续）

项目 / Item	典型值 / Typical Value
耐紫外线老化; QUV 2000 h, 无失光、褪色、起泡 / UV ageing; QUV 2,000 h, no loss of gloss, discoloration or blistering	优异 / Excellent
耐碱性 (30% NaOH, 72 h) / Alkali resistance (30% NaOH, 72 h)	无起泡、不剥落、不变色 / No blistering, peeling or discoloration
耐酸性 (30% H ₂ SO ₄ , 48 h) / Acid resistance (30% H ₂ SO ₄ , 48 h)	无起泡、不剥落、不变色 / No blistering, peeling or discoloration
耐油性 (120号溶剂油, 72 h) / Oil resistance (No. 120 solvent oil, 72 h)	无起泡、不剥落、不变色 / No blistering, peeling or discoloration
耐氯片 (有效氯8000 mg/L, 72 h) / Chlorine-tablet resistance (available chlorine 8000 mg/L, 72 h)	无起泡、不剥落、不变色 / No blistering, peeling or discoloration
低温柔性; 1/4英寸轴, 180°弯曲 / Low-temperature flexibility; 1/4-inch mandrel, 180° bend	-30°C, 通过 / -30°C, pass
服务温度范围; 无老化、硬化或流淌 / Service temperature range; without ageing, hardening or flow	-40°C to +120°C
操作期; +24°C, R.H. 50% / Pot life; +24°C, R.H. 50%	约30分钟 / Approx. 30 min
凝胶时间; +24°C, R.H. 50% / Gel time; +24°C, R.H. 50%	约40分钟 / Approx. 40 min
表干时间; +24°C, R.H. 50% / Surface-dry time; +24°C, R.H. 50%	约3小时 / Approx. 3 h
固化时间 / Cure time	24 h
参考用量 / Reference consumption	0.2-1.0 kg/m ² /coat

* 上述参考用量仅为理论值。

* The above reference consumption is theoretical only.

包装规格

20 kg /桶。

20 kg/pail.

清洁与储存

1. 清洁: 使用后立即以工业溶剂清洁工具和设备。干固后的材料仅可通过机械方式去除。
2. 存放期及存储: 原包装未开封时, 储存在干燥、有遮盖且温度为+15°C至+35°C的区域, 存放期为12个月。

Cleaning: clean tools and equipment with an industrial solvent immediately after use; cured material can be removed only by mechanical means; shelf life and storage: in the original unopened packaging, stored in a dry covered area at +15°C to +35°C, the shelf life is 12 months.

注意事项

1. 避免接触眼睛和皮肤, 以免产生刺激或伤害。
2. 避免吸入蒸气; 施工期间保持空气流通。
3. 户外施工人员及附近人员须佩戴经核准的化学呼吸器; 室内使用时佩戴输氧面罩或正压面罩。
4. 佩戴合适的防护手套、护目镜和防护衣。
5. 施工温度+5°C至+35°C, 相对湿度R.H. <85%。
6. 请勿在寒冷天气或降雨环境中使用。
7. 施工后对未完全干固区域进行防水、防潮、防冻及防踩踏保护, 避免持续处于高湿环境。
8. 请勿使用任何稀释剂稀释。
9. 施工后48小时内避免重度荷载。

Avoid contact with eyes and skin to prevent irritation or injury; avoid inhaling vapour and maintain air circulation during application; outdoor applicators and nearby personnel must wear an approved chemical respirator; indoors, wear a supplied-air or positive-pressure respirator; wear suitable protective gloves, safety goggles and protective clothing; application temperature is +5°C to +35°C and relative humidity is R.H. <85%; do not use in cold weather or rainy conditions; protect areas that are not fully cured against water, moisture, freezing and foot traffic and avoid prolonged high humidity; do not dilute with any thinner; avoid heavy loads for 48 hours after application.

安全与健康

1. 眼睛与皮肤刺激：如眼睛或皮肤接触本产品并引起刺激，请立即就医。
2. 如误食本产品，不要试图催吐；立即联系医生或毒物防控中心，切勿给失去知觉者喂食任何东西。
3. 使用后应立即彻底清洁双手。
4. 穿戴合适的防护服、手套、护目镜和面部保护装置；被污染的衣物和防护装置须清洗后再用。
5. 使用本产品时请勿进食、饮水或吸烟。
6. 未使用的产品、容器及受污染废物、废料应按当地法律法规处置。
7. 不使用时紧闭容器，并置于儿童接触不到的地方。

Eye and skin irritation: if contact causes irritation, seek medical attention immediately; if swallowed, do not induce vomiting; contact a physician or poison control centre immediately and give nothing by mouth to an unconscious person; wash hands thoroughly immediately after use; wear suitable protective clothing, gloves, goggles and face protection; clean contaminated clothing and equipment before reuse; do not eat, drink or smoke while using this product; dispose of unused product, containers and contaminated waste in accordance with local law; keep the container tightly closed when not in use and out of reach of children.

关键施工提醒

混合料应在30分钟内用完；标准条件下约3小时表干、24小时固化。复涂间隔原则上不超过24小时，超过规定窗口应按配套要求进行层间处理。

Use the mixed material within 30 minutes. Under standard conditions, the coating is surface-dry in approximately 3 hours and cures in 24 hours. The recoating interval should not exceed 24 hours; if it does, prepare the intercoat surface as required by the system.

联系方式

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