

PP-401

RHEOLOGY CONTROL PERFORMANCE PACKAGE

APPLICATION GUIDE / 应用指南

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Product	PP-401	Developed by	Nova Materials Group LLC, USA

1. PRODUCT APPLICATION

1. 产品应用

PP-401 is intended for use as a rheology-control component within technically qualified cement-based engineered stone manufacturing systems. Its role is to establish the required balance between fresh-state stability and processability while supporting uniform material distribution and manufacturing consistency.

PP-401 用于经技术确认的水泥基无人造石制造体系，作为流变控制性能组分使用。其作用是在新拌料稳定性与加工性之间建立合理平衡，同时支持材料均匀分布及制造一致性。

2. GENERAL USE PRINCIPLES

2. 基本使用原则

- Use PP-401 according to the production formulation specified or approved by Nova.
- Determine dosage according to the approved material system, actual fresh-state condition, processing sequence, environmental conditions, and required rheological behavior.
- Evaluate stability and processability together; higher dosage should not automatically be interpreted as better rheological control.
- Maintain accurate batching and consistent production conditions.
- When raw materials, equipment, environmental conditions, or product specifications change, verify performance through controlled production trials.
- 按照 Nova 确定或认可的生产配方使用 PP-401。
- 根据经批准的材料体系、实际料态、加工程序、环境条件及目标流变状态确定用量。
- 应同时评价料态稳定性与加工性，不应将更高用量简单理解为更好的流变控制。
- 保持准确计量及稳定的生产条件。
- 当原材料、设备、环境条件或产品规格发生变化时，应通过受控生产试验验证性能。

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3. PROCESS INTEGRATION

3. 工艺配合

PP-401 is designed to operate within the complete materials-engineering system rather than as a stand-alone thickening additive. Rheological control should support stable fresh-state behavior, uniform distribution of solids and aggregate, reliable material movement during processing, and consistent finished-product quality.

PP-401 应作为完整材料工程体系中的流变控制性能组分使用，而不应简单作为独立增稠材料评价。流变控制应同时服务于新拌料稳定、砂粉及骨料均匀分布、加工过程中的可靠物料运动以及成品质量的一致性。

For consistent production:

- Follow the approved material formulation and production sequence.
- Observe fresh-state behavior throughout mixing, transfer, placing, vacuum treatment, and forming as applicable.
- Check for bleeding, segregation, aggregate settlement, water marks, and local material non-uniformity.
- Adjust only within approved technical limits and verify changes under controlled production conditions.
- Use the applicable approved manufacturing specification for MINERALSKIN™ and authorized OEM production.

为保持生产稳定性：

- 按照经批准的材料配方及生产顺序操作。
- 根据适用工艺，在搅拌、转移、布料、真空处理及成型过程中持续观察料态。
- 检查是否存在泌水、分层、骨料沉降、水印及局部材料不均匀等现象。
- 仅在经批准的技术范围内进行调整，并在受控生产条件下验证变化。
- MINERALSKIN™ 及授权 OEM 生产应按照相应批准生产技术规范执行。

4. STORAGE & HANDLING

4. 储存与操作

- Store in a cool, dry place.
- Keep packaging properly closed and protect from moisture.
- Protect from contamination during storage and use.
- Follow the current approved TDS, SDS, and workplace safety requirements for detailed handling instructions.
- 存放于阴凉干燥处。
- 保持包装密闭并防止受潮。
- 储存及使用过程中避免污染。
- 详细操作要求应遵循当前批准版本的 TDS、SDS 及工作场所安全要求。

5. TECHNICAL SUPPORT

5. 技术支持

For formulation development, process adjustment, scale-up, or troubleshooting, technical consultation with Nova Materials Group LLC is recommended. Product application should be verified under actual production conditions before commercial-scale manufacturing.

对于配方开发、工艺调整、规模化生产或生产问题分析，建议与 Nova Materials Group LLC 进行技术沟通。在正式商业化批量生产前，应结合实际生产条件对产品应用进行验证。