



Endex International

Innovation for the Future

ENDEX 4221™

Endothermic Chemical Foaming Agent and Process Aid

Endex 4221™ is a high efficiency pelletized concentrate, in a thermoplastic polymer carrier. It is designed for use in both commodity and engineering plastics, and may be dried with the polymer if needed. It combines its endothermic properties, quality and efficiency, with versatility and cost-effectiveness.

Endex 4221™ endothermic chemical foaming agent utilizes innovative technology to produce superior quality foamed products. It generates very fine, closed-cell foams, which result in moldings and extrusions of high quality.

Endex 4221™ Processing Aid can be used in injection molding for cycle time reduction, improved polymer flow, reduced processing temperatures, improved weld line strength, and to eliminate molded-in stresses which cause warp and sinks.

Endex 4221™ is intended for use in a wide variety of processes, including:

- Injection molding for cycle time reduction, sink marks, warp reduction, shrink control.
- Structural Foam molding (SFM). Gas Counter-pressure foam molding.
- Nitrogen SFM for finer cell structures and extra weight reduction.
- Gas Assist molding for extra weight reduction and sink elimination.
- Extrusion of Sheet, Film, and Profiles.
- Blow Molding, Rotational Molding.

Endex 4221™ use levels will vary with the application, but the following guidelines can be used as a starting point. Optimization for each application is recommended:

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|------------------------------|-------------|--------|
| • Structural Foam Molding | Endex 4221™ | 1 - 2% |
| • Sink Mark Elimination | Endex 4221™ | 0.1 % |
| • Nitrogen Foam Molding | Endex 4221™ | 0.3 % |
| • Extrusion and Blow Molding | Endex 4221™ | 0.3 % |

Endex 4221™ has many advantages for the plastics processor, including:

- Fine cell structure
- Shorter cycle times
- Faster extrusion
- Thick, smooth skins in SFM
- Fast degassing
- Fast painting and decorating
- No plate-out on molds
- Beryllium-copper compatible
- G.R.A.S. or FDA sanctioned ingredients

Endex 4221™ is available in 50 lb cartons, or 1000 lb boxes.

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You can also visit our website at: www.endexint.net or email us at info@endexint.net for more information.

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