

# Sink Mark Reduction in High Pressure Injection Molding Applications



Swirled surface on plastic part in application where surface appearance is not critical.



Class A surface with no swirling or sink marks.

The use of chemical foaming agents, such as certain grades of Bergen International's Foamazol™ CFAs, can be very effective in sink mark removal in injection molded parts. Foamazol™ 62 is specifically designed to be used in high pressure injection molding machines to remove sink marks without causing the typical swirling seen on the surface of foam molded parts. The end result is a product with a Class A surface.



Various caps foamed with Foamazol™ 62.

## Other advantages to using Foamazol™ 62 are:

- Foamazol™ 62 can be added like any other additive to the process such as color, UV, etc.
- Shorter cooling times are required with Foamazol™ 62 resulting in faster overall cycle times.
- No post pressure is required after the shot when processing with Foamazol™ 62.

There are many factors involved in good sink mark reduction such as proper mold design and proper selection of a CFA. Following these guidelines can further improve sink mark reduction when using Foamazol™ 62 on a high pressure injection molding machine:

- Use a low enough temperature in the feeding section to prevent pre-foaming.
- Use a high enough temperature in the compression zone to provide optimum gas yield.
- Use a shut of nozzle or an injection point adjacent to the mold if possible.
- Use a high enough injection rate to ensure proper gas dispersion and expansion after the injection shot is complete.
- Use a high enough pressure to allow for a high injection rate, while maintaining low enough pressure to prevent "overpacking" the mold.

For additional information on Foamazol™ 62 or other CFAs please call **1-888-608-2944**.



## Bergen International LLC

151 West Passaic Street • Rochelle Park, NJ 07662  
Phone: (201) 909-3767 • Toll Free: (888) 608-2944  
Fax: (201) 909-3769 • Web: [www.bergeninternational.com](http://www.bergeninternational.com)  
Email: [sales@bergeninternational.com](mailto:sales@bergeninternational.com)

*"Your #1 Source for Chemical Foaming Agents"*