Niax* silicone L-618

Description

Niax silicone L-618 is specially designed and formulated to provide optimum foam stability with superior cost/performance benefit. This silicone surfactant provides broad process latitude in all grades of conventional flexible foams, including those of very low density where high loading with auxiliary blowing agents act to destabilize foams during production.

Key Features and Typical Benefits

- Provides excellent foam processing latitude
- Reduces density gradients in very tall buns
- Provides FR performance equivalent to Niax silicone L-5770
- Helps improve foam yield
- Provides fine, even cell structure

Typical Physical Properties

Appearance	Clear, straw colored liquid
Specific Gravity, 25°C	1.0313
Specific Gravity, 55°C	1.0079
Viscosity at 25°C, cSt	530
Flash Point, °F (°C)	220 (104)
Coefficient of Expansion, per °C	7.6×10^{-4}

Processing Recommendations

Surfactant Performance

The performance characteristics of Niax silicone L-618 are demonstrated by the effects that surfactant and tin catalyst concentration have on resulting foams. The two formulations below were used to demonstrate the effect of Niax silicone L-618 concentration and tin catalyst concentration on foam height.

Table 1:

Components	Effect of Surfactant	Effect of Tin Catalyst
Polyol (#OH=56)	100	100
Water	5.5	5.5
Methylene Chloride	10	10
Niax silicone L-618	Vary (0.5-1.5 php)	0.9
Niax catalyst A-200	0.2	0.2
Stannous Octoate	0.23	Vary (0.17-0.27 php)
Toluene Diisocyanate, 80/20	71.1	71.1
Index	112	112

Figure 1: Effect of Niax Silicone L-618 Concentration on Foam Height

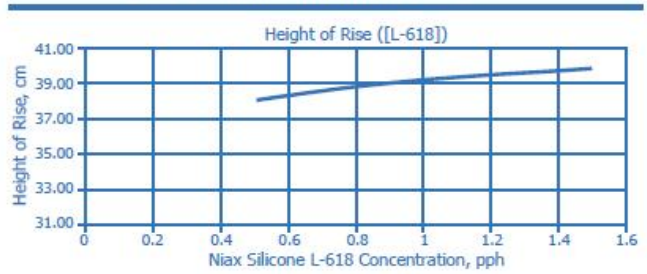
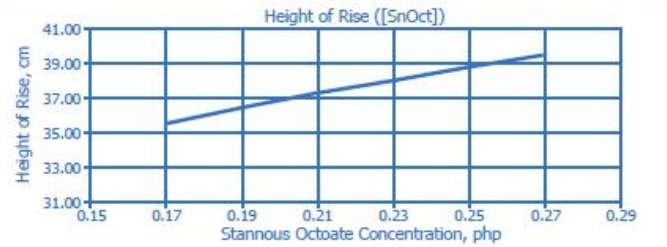


Figure 2: Effect of Tin Catalyst Concentration on Foam Height



Typical Starting Formulation

Niax silicone L-618 can used in a very broad cross section of foam grade. These two formulations are typical of what might be used.

Table 2:

Components	Parts	Parts
Polyol (#OH=56)	100	100
Water	5.5	3.3
Methylene Chloride	10	0
Geolite* modifier 91		0.75
Niax silicone L-618	0.8	1.0
Niax catalyst A-230	0.2	
Niax catalyst A- 133		0.21
Niax catalyst D-19	0.25	0.18
Toluene Diisocyanate, 80/20	71.1	41.4
Index	115	100
Density, pcf	0.9	1.8
25% IFD	28	28
Air Flow, CFM	3.0	4.2

Patent Status

Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute the permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

Product Safety, Handling and Storage

Customers should review the latest Safety Data Sheet (SDS) and label for product safety information, safe handling instructions, personal protective equipment if necessary, emergency service contact information, and any special storage conditions required for safety. Momentive Performance Materials (MPM) maintains an around-the-clock emergency service for its products. SDS are available at www.momentive.com or, upon request, from any MPM representative. For product storage and handling procedures to maintain the product quality within our stated specifications, please review Certificates of Analysis, which are available in the Order Center. Use of other materials in conjunction with MPM products (for example, primers) may require additional precautions. Please review and follow the safety information provided by the manufacturer of such other materials.

Limitations

Customers must evaluate Momentive Performance Materials products and make their own determination as to fitness of use in their particular applications.

Contact Information

For product prices, availability, or order placement, contact our customer service at Momentive.com/CustomerService/

For literature and technical assistance, visit our website at: www.momentive.com

DISCLAIMER:

THE MATERIALS, PRODUCTS AND SERVICES OF MOMENTIVE PERFORMANCE MATERIALS INC. AND ITS SUBSIDIARIES AND AFFILIATES (COLLECTIVELY "SUPPLIER"), ARE SOLD SUBJECT TO SUPPLIER'S STANDARD CONDITIONS OF SALE, WHICH ARE INCLUDED IN THE APPLICABLE DISTRIBUTOR OR OTHER SALES AGREEMENT, PRINTED ON THE BACK OF ORDER ACKNOWLEDGMENTS AND INVOICES, AND AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION, RECOMMENDATIONS, OR ADVICE CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SUPPLIER MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, (i) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING ITS PRODUCTS, MATERIALS, SERVICES, RECOMMENDATIONS OR ADVICE. EXCEPT AS PROVIDED IN SUPPLIER'S STANDARD CONDITIONS OF SALE, SUPPLIER AND ITS REPRESENTATIVES SHALL IN NO EVENT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS MATERIALS, PRODUCTS OR SERVICES DESCRIBED HEREIN. Each user bears full responsibility for making its own determination as to the suitability of Supplier's materials, services, recommendations, or advice for its own particular use. Each user must identify and perform all tests and analyses necessary to assure that its finished parts incorporating Supplier's products, materials, or services will be safe and suitable for use under end-use conditions. Nothing in this or any other document, nor any oral recommendation or advice, shall be deemed to alter, vary, supersede, or waive any provision of Supplier's standard Conditions of Sale or this Disclaimer, unless any such modification is specifically agreed to in a writing signed by Supplier. No statement contained herein concerning a possible or suggested use of any material, product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Supplier covering such use or design, or as a recommendation for the use of such material, product, service or design in the infringement of any patent or other intellectual property right.