

NIAX* Silicone L-633
For Polyurethane Flexible Slabstock Foam

Product Description NIAX* Silicone L-633 is a high potency, alkyl-pendant organo-silicone for use in flexible foam production of low and ultra-low density foam grades with fillers and high blowing agent concentration. It is designed to provide strong stabilization and good processing latitude. This product is a strong stabilizer, therefore it is not recommended for medium to high-density foam grades.

- Features and Benefits**
- High-efficiency Silicone
 - Excellent cell stabilization in high methylene chloride and water formulations
 - Offers good foam height and low recession while maintaining good foam porosity
 - Provides good cell structure and narrow density gradient
 - Easy to process in both box and continuous machine for density from 5 to 18 kg/m³

Typical Physical Properties

Appearance	Clear Amber Liquid
Viscosity, 25°C (cSt)	700 - 1200
Specific Gravity, 25°C	1.024
Flash point, °C (Pensky-Martens Closed Cup) ^{*(1)}	83

^{*(1)}ASTM Method D93

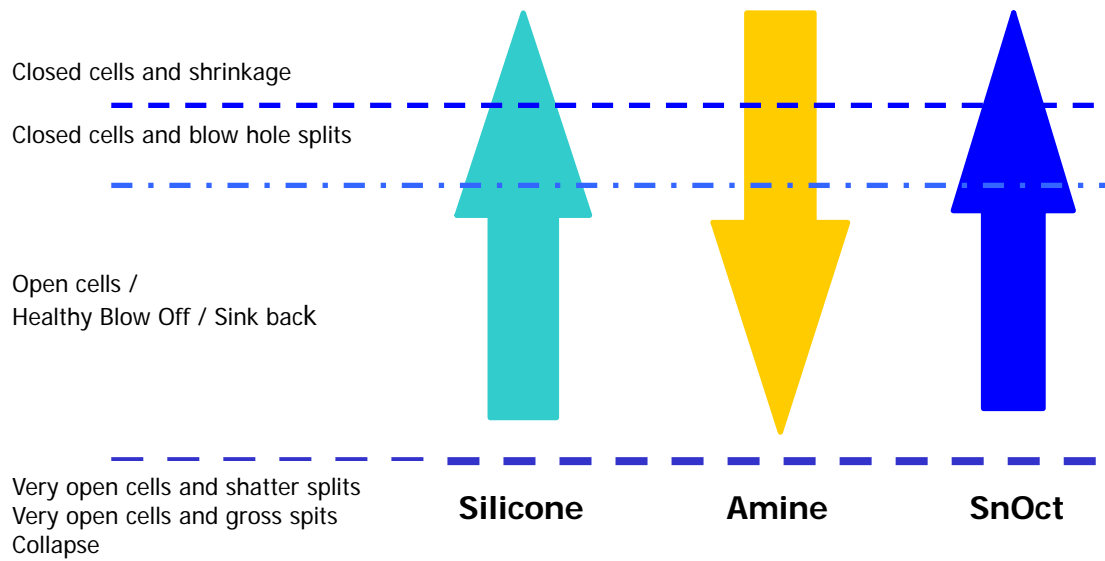
Application and General Guide

NIAX* Silicone L-633 is specially designed for use in ultra low or low density slabstock foams that employ very high concentration of water, blow agent or solid fillet. Such formulations may need formulation adjustments as well as adjustment of machine conditions and parameters. Therefore, it is important to gain better understanding of the effect of formulating parameters on the processing such as:

1. Blowing agent and filler use level
2. TDI index for low density foam grade is commonly at around 120 to 150
3. Silicone surfactant potency and use – strong potency silicone or excess silicone will over stabilize the system and results in poor foam blow-off or splits
4. A balance of amine and tin catalyst is important to maintain a good quality foam.
 - Too little SnOct/Polymer gels too late, the filaments contract as liquid drains out of them – development of splits
 - Excess SnOct/Polymer gel too early, restricted blow off or cell windows do not burst. Tight foam has a dead feel and in severe case, foam may shrink on cooling

General Guide
(Cont')

Additive Requirements	Silicone	Amine	Sn Oct
Variable	Effect on increasing fomulation variables on additives dosage		
Water	↑	↓	↓
Blowing	↑	↑	↑
Filler	↑	No	↑
TDI Index	No	↓	↓



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 considering the use of this product should review the latest Material Safety Data Sheet and label for product safety information, handling instructions, personal protective equipment if necessary, and any special storage conditions required. Material Safety Data Sheets are available at www.momentive.com or, upon request, from any Momentive Performance Materials representative. Use of other materials in conjunction with Momentive Performance Materials 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.

PRINCIPAL LOCATIONS – Regional Information

North America	World Headquarters 187 Danbury Road Wilton, CT 06897, USA	T 800.295.2392	F 607.754.7517
Latin America	Rodovia Eng. Constância Cintra, Km 78,5 Itatiba, SP – 13255-700, Brazil	T +55.11.4534.9650	F +55.11.4534.9660
Europe, Middle East, Africa and India	D-51368 Leverkusen Germany	T 00.800.4321.1000 T +31.164.293.276	F +31.164.241.750
Pacific	Akasaka Park Building - 5-2-20 Akasaka Minato-ku, Tokyo 107-6112 Japan	T +81.3.5544.3100	F +81.3.5544.3101

CUSTOMER SERVICE CENTERS

North America	Charleston, WV 25314, USA E cs-na.silicones@momentive.com		
	<ul style="list-style-type: none"> • Specialty Fluids • UA, Silanes, Resins, and Specialties • RTV Products-Elastomers • Sealants and Adhesives & Construction 	T 800.523.5862 T 800.334.4674 T 800.332.3390 T 877.943.7325	F 304.746.1654 F 304.746.1623 F 304.746.1623 F 304.746.1654
Latin America	E cs-la.silicones@momentive.com		
	<ul style="list-style-type: none"> • Argentina & Chile • Brazil • Mexico & Central America • Venezuela, Ecuador, Peru, Colombia, & Caribbean 	T +54.11.4862.9544 T +55.11.4534.9650 T +52.55.5899.5135 T +58.212.285.2149	F +54.11.4862.9544 F +55.11.4534.9660 F +52.55.5899.5138 F +58.212.285.2149
Europe, Middle East, Africa and India	E cs-eur.silicones@momentive.com	T 00.800.4321.1000 T +31.164.293.276	F +31.164.241750
Pacific	E cs-ap.silicones@momentive.com		
	<ul style="list-style-type: none"> • Japan • China • Korea • Singapore 	T +81.276.20.6182 T +86.21.5050.4666 (ext. 1523) T +82.2.6201.4600 T +65.6220.7022	
Worldwide Hotline	Worldwide www.momentive.com	Web T 800.295.2392 T +607.786.8131	F +607.786.8309

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