

Niax^{*} Silicone SC-154

for use with CO₂ as auxiliary blowing agent

Product Description

Niax silicone SC-154 is a silicone stabilizer, designed to provide excellent foam stability and fine regular cell structure in low density foams using liquid carbon dioxide as the blowing agent.

Niax silicone SC-154 is a hydrolyzable silicone that can be used as a separate stream or in water/amine/silicone preblends. In preblends, it is recommended that the silicone comprise no more than 30% by weight based on the water content so as to ensure sufficiently low viscosity. Such blends are stable over a few days.

Niax silicone SC-154 offers excellent processing latitude and yields foams with good breathability.

Key Features and Typical Benefits

- Silicone with medium efficiency
- Excellent foam stability and cell structure in low density formulations blown with liquid carbon dioxide
- Offers superior processing latitude in the full range of flexible polyether slabstock foams

Typical Physical Properties

Form	Clear liquid
Viscosity at 25°C, cSt	1150
Color (Gardner)	<2
Specific Gravity, 20°C	1.03
Flash Point, Pensky Martens Closed Cup, (ASTM D 93), °C	91
Freezing Point, °C	0

Momentive Performance Materials provides versatile materials as the starting point for our creative approach to ideas that help enable new developments across hundreds of industrial and consumer applications. We are helping customers

solve product, process, and performance problems; our silanes, fluids, elastomers, sealants, resins, adhesives, urethane additives, and other specialty products are delivering innovation in everything from car engines to biomedical devices.

From helping to develop safer tires and keeping electronics cooler, to improving the feel of lipstick and ensuring the reliability of adhesives, our technologies and enabling solutions are at the frontline of innovation.



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Formulations

The following are some industrial results with Niax silicone SC-154.

Grade		14 ⁽¹⁾	16	18
Component, Parts by Weight				
3500 MW EO/PO Polyol		100	100	100
Water		4.8	4.5	3.45
Carbon Dioxide		4.5	5	5.2
Niax Silicone SC-154		1.7	1.2	1.2
TDI Index		112	112	106
Foam Properties				
Density, kg/m ³	Top	13.7	15.5	17.7
	Middle	14.0	16.2	18.4
	Bottom	14.0	16.2	18.6
CDH 40%, kPa	Top	2.0	–	–
	Middle	2.0	–	–
	Bottom	2.0	–	–
IFD 40%, N	Top	–	96	75
	Middle	–	97	74
	Bottom	–	103	78

(1) Flat top system

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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.

Emergency Service

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Location	Momentive Performance Materials Products	All Chemical Products
Mainland U.S., Puerto Rico	518.233.2500	CHEMTREC: 800.424.9300
Alaska, Hawaii	518.233.2500	CHEMTREC: 800.424.9300
Canada	518.233.2500	CANUTEC: 613.996.6666 (collect) or CHEMTREC: 800.424.9300
Europe, Middle East, Africa	+32.(0)14.58.45.45 (Belgium)	CHEMTREC: +1-703.527.3887 (collect)
Latin America, Asia/Pacific, all other locations worldwide	+518.233.2500	CHEMTREC: +1-703.527.3887 (collect)
At sea	Radio U.S. Coast Guard, which can directly contact Momentive Performance Materials at 518.233.2500 or CHEMTREC at 800.424.9300.	

DO NOT WAIT. Phone if in doubt. You will be referred to a specialist for advice.

Principal Locations

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	RTV Products-Elastomers 800.332.3390	304.746.1623
	Sealants and Adhesives and Construction 877.943.7325	304.746.1654
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