Niax* Catalyst LC-5636

For Polyurethane Applications

Product Description

Niax Catalyst LC-5636 is a delayed action heat activated catalyst for urethane systems, offering urethane formulators alternatives to tin, mercury, and nickel based catalysts.

Key Features and Typical Benefits

- Heat activated
- Delayed action catalytic effect
- Increased pot life at ambient or low temperature in microcellular and/or RIM applications
- Hydrolytically stable
- Gel selective catalyst in the presence of small amounts of water

Typical Physical Properties

Appearance	Dark Green
Viscosity (25 ºC), cSt	21
Refractive Index (20 ºC)	1.477
Flash Point, Pensky-Martens Closed Cup(1) °C (°F)	86.67 (188)

(1)ASTM Method D93

Typical physical properties are average data and are not to be used as or to develop specifications.

Table 1. Example one-shot elastomer system sample formulation.

Raw Material	pphr
Polyether Polyol (OH = 35)	94
Ethylene Glycol	6
Catalyst	0.01 - 5 Index
Modified MDI (29% NCO, Eq. Weight = 144)	103.5

Product formulations are included as illustrative examples only. Momentive makes no representation or warranty of any kind with regard to any such formulations, including, without limitation, concerning the efficacy or safety of any product manufactured using such formulations.

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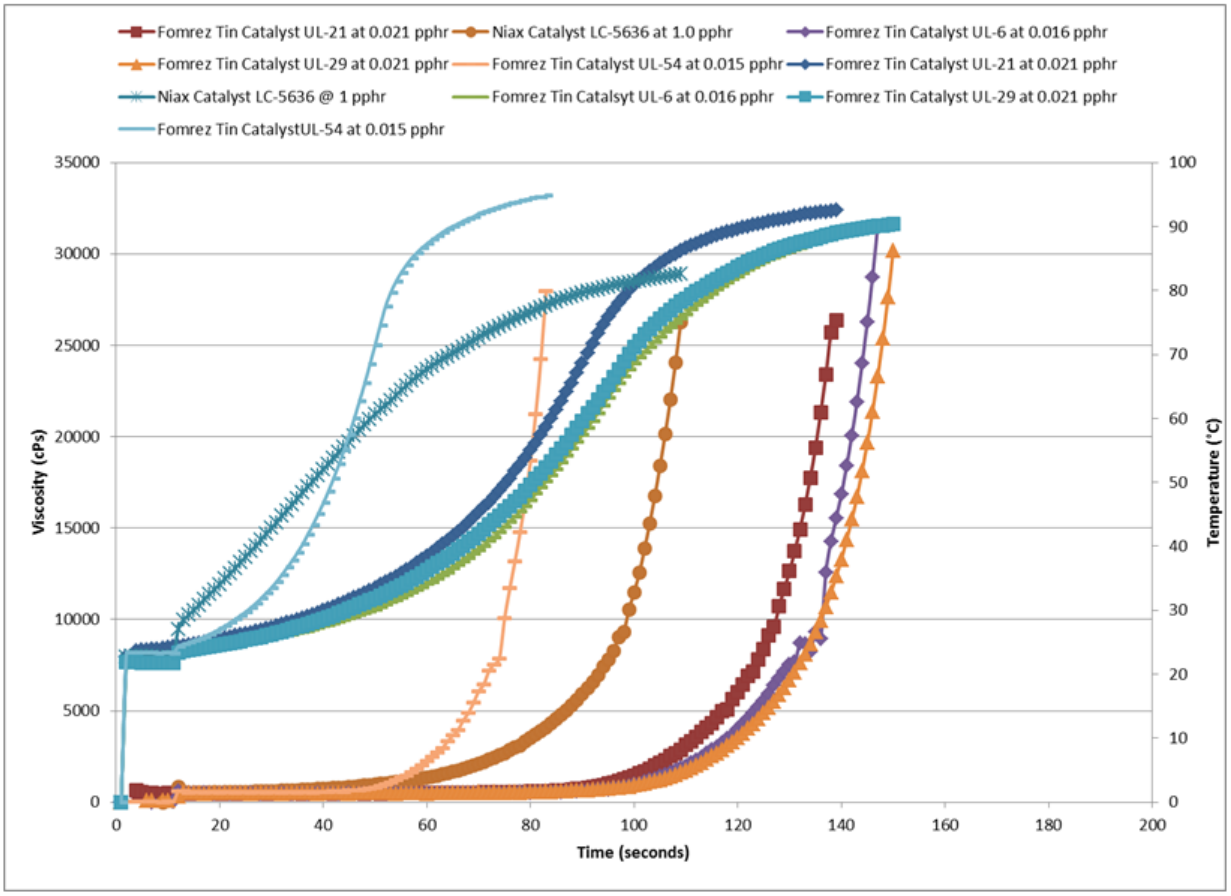
Table 2. Durometer (Hardness) comparison of one-shot elastomers with delayed Fomrez† Tin Catalysts and Niax Catalyst LC-5636.

Catalyst	Shore A	Shore D	Asker C
Fomrez Tin Catalyst UL-29	46	8	62
Fomrez Tin Catalyst UL-6	51	11	67
Fomrez Tin Catalyst UL-54	55	12	71
Fomrez Tin Catalyst UL-21	50	10	66
Niax Catalyst LC-5636	52	11	70

Note: Test data. Actual results may vary.

Figure 1. Exotherm Temperature and viscosity versus time of a one-shot polyether based elastomer system catalyzed with various delayed Fomrez Tin Catalysts and Niax Catalyst LC-5636.



Note: Test data. Actual results may vary.

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Table 3. Example Mechanical Froth Foam Formulation.

Raw Material	pphr
Polyether Polyol (OH = 35)	61
Polymer Polyol (OH = 32)	26
DPG	13
Surfactant	2
Catalyst	0.1 - 5
	Index
Modified MDI (29% NCO, Eq. Weight = 144)	103.5

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Figure 2. Exotherm Temperature versus time of a Mechanical Froth Foam system catalyzed with various levels of Niax Catalyst LC-5636 or Niax Catalyst LC-5615.

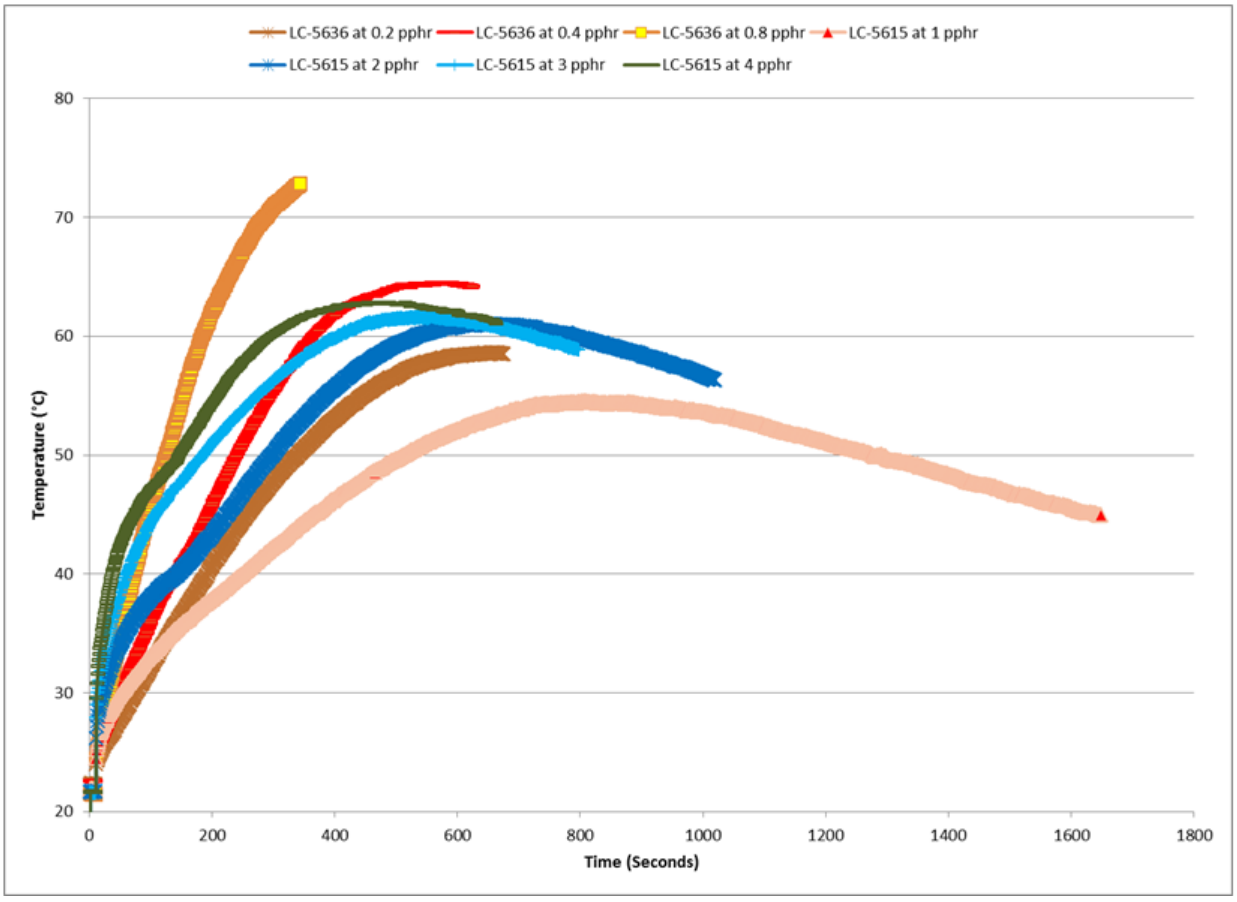

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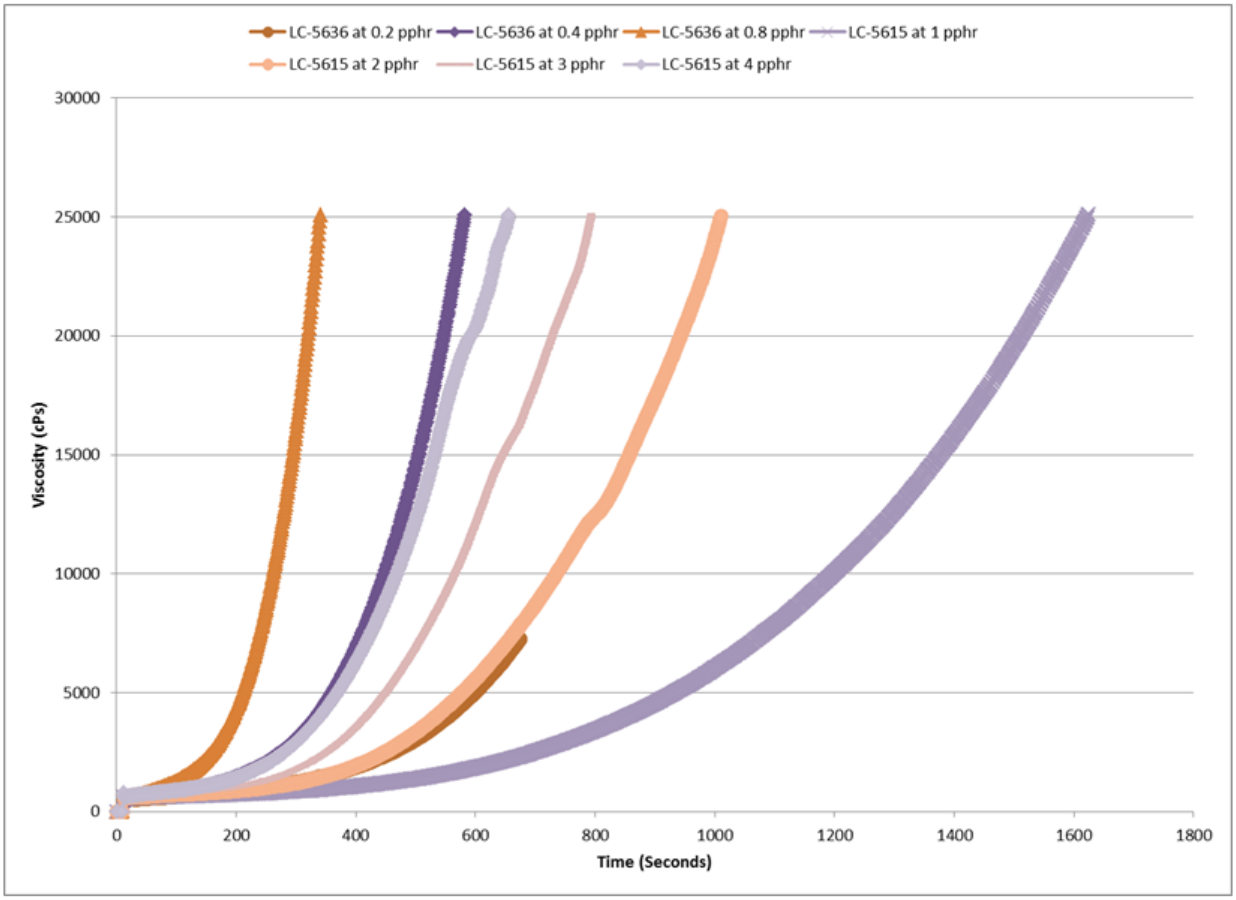
Figure 3. Viscosity versus time of a Mechanical Froth Foam system catalyzed with various levels of Niax Catalyst LC-5636 or Niax Catalyst LC-5615.



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Patent Status

Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute a 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.

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