



NYLABOND™ THERMOPLASTIC VULCANIZATE

THERMOPLASTIC ELASTOMER

FEATURES

- Numerous global automotive and UL approvals
- Produced using Santoprene™ TPV technology
- Weatherable and colorable
- Hardness range 55 to 85 Shore A
- Rubber-like tactile feel

BENEFITS

- Performance and bondability
- Better balance of properties than styrenic TPEs
- Superior thermal properties
- Excellent chemical resistance
- Superior compression set properties
- Standard grades stocked for immediate shipment

Imagine thermoplastic elastomers (TPEs) that bond exceptionally well to nylon substrates during overmolding but offer higher performance than styrenic TPEs... these compounds are available from RTP Company!

RTP Company has licensed the manufacturing rights from ExxonMobil Chemical for their patented, nylon bondable, TPV product line made from Santoprene™ thermoplastic vulcanizate (TPV) TPEs.

Nylabond™ 6091 Series TPV compounds can be overmolded onto rigid nylon substrates to create a soft protective or ergonomic surface that provides a durable and rubbery feel. The bond is a permanent, cohesive bond that can withstand exposure to temperature, various chemicals, and moisture.

By nature of their cross-linked rubber content, TPVs offer desirable properties that result in a higher performance material when compared to styrenic-based TPEs. Key properties include:

- Service temperature range of -60 °F to 255 °F (-51 °C to 125 °C)
- Excellent compression set at both room and elevated temperatures for superior long term sealing performance
- Resistance to a wide range of chemicals

Nylabond™ 6091 Series TPVs from RTP Company are available in hardness levels from 55 to 85 Shore A. Natural and black grades are stocked for immediate shipment. Our Nylabond™ 6091 Series TPVs are based on industry-leading technology... available from RTP Company - your global compounder of custom engineered thermoplastics!

*Santoprene™ TPV is a trademark of Exxon Mobil Corporation.
Nylabond™ is a trademark of RTP Company.*

GLOBAL AUTOMOTIVE APPROVALS

| | Manufacturer Specifications | | | |
|--------------------------|-----------------------------|-------------------------|----------------|--------------|
| | Chrysler | General Motors | Ford | Daimler Benz |
| Nylabond™ 6091-55A Black | MSAR-100 AAN | GMW 15817P type 1 | SAE J2558 TPV* | DBL 5562 |
| Nylabond™ 6091-55A NAT | ---- | ---- | ---- | ---- |
| Nylabond™ 6091-70A Black | MSAR-100 BAN | GMW 15817P type 2 | SAE J2558 TPV* | DBL 5562 |
| Nylabond™ 6091-85A Black | MSAR-100 CAN | ---- | SAE J2558 TPV* | ---- |
| Nylabond™ 6091-85A PA12 | ---- | GMW 15702 GM Europe LCO | ---- | ---- |

*LCO available; Ford Motor Company permits use of these materials under appropriate SAE J2558 TPV line call outs.



RTP Company Corporate Headquarters • 580 East Front Street • Winona, Minnesota 55987 USA website: www.rtpcompany.com • email: rtp@rtpcompany.com

TELEPHONE: U.S.A. +1 507-454-6900 SOUTH AMERICA +55 11 4193-8772 MEXICO +52 81 8134-0403 EUROPE +33 380-253-000 SINGAPORE +65 6863-6580 CHINA +86 512-6283-8383 Wiman Corporation +1 320-259-2554 ESP™ +1 800-432-2386



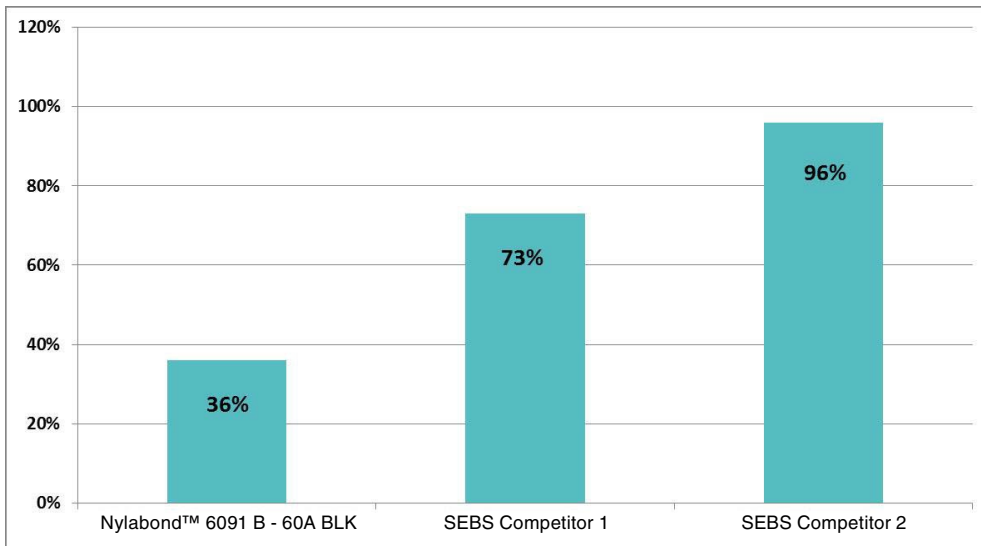
NYLABOND™ THERMOPLASTIC VULCANIZATE

COMPARISON OF TYPICAL COMPOUND PROPERTIES*

| RTP Company Compounds | Bonding | Hardness | Specific Gravity | Tensile Strength | Tensile Elongation | Tensile Stress | Tear Strength | Compression Set |
|-----------------------------|---------|----------|------------------|----------------------|--------------------|--------------------|----------------------|---|
| Nylabond™ 6091-55A BLK | PA6 | 55A | 0.94 | 440 PSI 3.0 mpA | 300% | 259 psi 2.0 MPa | 70 pli 12.3 N/mm | 35% @ 158 °F/70 °C 56% @ 257 °F/125 °C |
| Nylabond™ 6091-70A BLK | PA6 | 70A | 0.94 | 645 PSI 4.4 mpA | 300% | 395 psi 2.7 MPa | 110 pli 19.3 N/mm | 44% @ 158 °F/70 °C 63% @ 257 °F/125 °C |
| Nylabond™ 6091-85A BLK | PA6 | 83A | 0.94 | 1,030 PSI 7.1 mpA | 400% | 625 psi 4.3 MPa | 160 pli 28.0 N/mm | 50% @ 158 °F/70 °C 69% @ 257 °F/125 °C |
| Nylabond™ 6091-55A NAT | PA6 | 55A | 0.93 | 425 PSI 2.9 mpA | 300% | 255 psi 1.8 MPa | 65 pli 11.4 N/mm | 37% @ 158 °F/70 °C 56% @ 257 °F/125 °C |
| Nylabond™ 6091-70A NAT | PA6 | 70A | 0.93 | 655 PSI 4.5 mpA | 330% | 390 psi 2.7 MPa | 110 pli 19.3 N/mm | 47% @ 158 °F/70 °C 66% @ 257 °F/125 °C |
| Nylabond™ 6091-85A NAT | PA6 | 83A | 0.93 | 1,025 PSI 7.1 mpA | 440% | 600 psi 4.1 MPa | 165 pli 28.9 N/mm | 57% @ 158 °F/70 °C 77% @ 257 °F/125 °C |
| Nylabond™ 6091-85A PA12 BLK | PA12 | 85A | 0.98 | 1,150 PSI 7.9 mpA | 350% | 750 psi 5.2 MPa | 160 pli 28.0 N/mm | 37% @ 158 °F/70 °C 58% @ 257 °F/125 °C |
| Nylabond™ 6091 B-60A BLK | PA | 65A | 0.94 | 485 PSI 3.3 mpA | 200% | 355 psi 2.4 MPa | 100 pli 17.5 N/mm | 36% @ 158 °F/70 °C 50% @ 257 °F/125 °C |
| Nylabond™ 6091 B-60A NAT | PA | 65A | 0.93 | 450 PSI 3.1 mpA | 300% | 340 psi 2.3 MPa | 100 pli 17.5 N/mm | 39% @ 158 °F/70 °C 52% @ 257 °F/125 °C |

*Data generated from testing performed by RTP Company using similar molding conditions, laboratory conditions, and procedures.

COMPRESSION SET @ 70 °C (ASTM D 395 METHOD B, TYPE 2)



Compression set is the amount of permanent deformation a material sustains after controlled exposure to compression force. Because this test measures the amount of a material that fails to return to normal height, a lower compression set percentage indicates better performance.



RTP COMPANY: YOUR GLOBAL COMPOUNDER OF CUSTOM ENGINEERED THERMOPLASTICS

No information supplied by RTP Company constitutes a warranty regarding product performance or use. Any information regarding performance or use is only offered as suggestion for investigation for use, based upon RTP Company or other customer experience. RTP Company makes no warranties, expressed or implied, concerning the suitability or fitness of any of its products for any particular purpose. It is the responsibility of the customer to determine that the product is safe, lawful and technically suitable for the intended use. The disclosure of information herein is not a license to operate under, or a recommendation to infringe any patents.