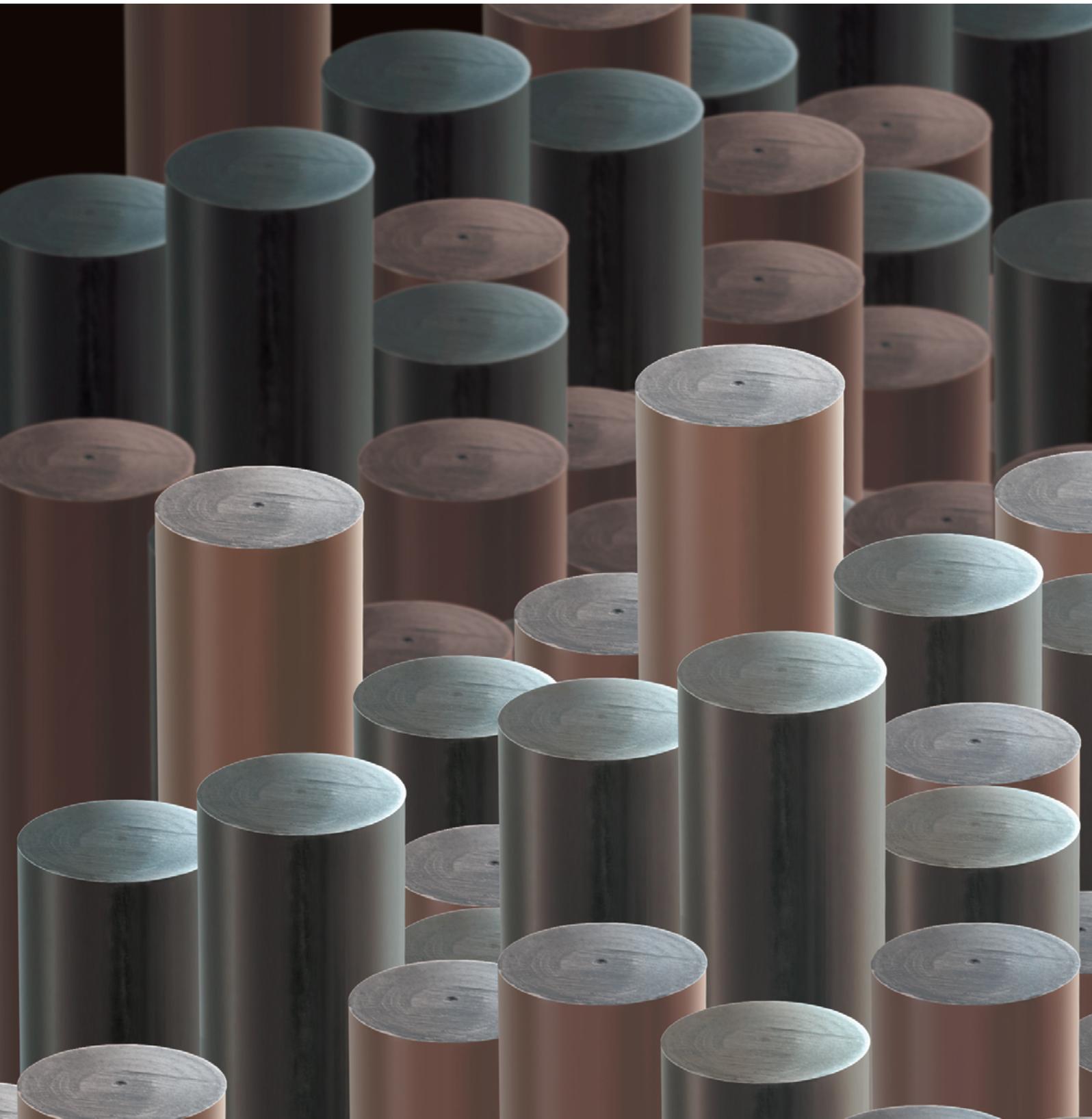




DuPont™ Vespel® Shapes

Dependable Performance in Demanding Applications



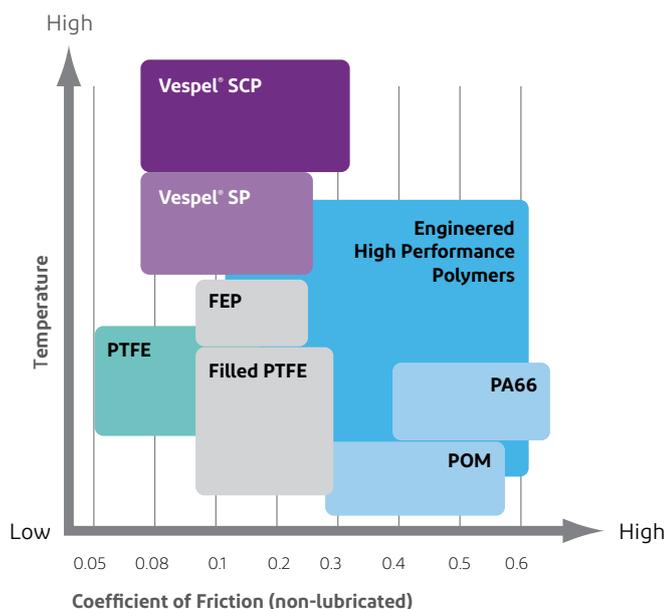
DuPont™ Vespel® shapes perform beyond conventional material

If you need dependable performance critical to your operations...



Vespel® shapes can be machined into seals and rings, bushings, thrust washers, balls, test sockets or any shape where you need excellent long-term performance.

Vespel® shapes come in various grades to provide a balance of friction and temperature resistance in demanding applications.



Vespel® shapes provide outstanding design flexibility combined with a unique combination of the physical properties common among engineered plastics, metals and ceramics.

Vespel® shapes offer:

- Proven performance when used continuously in air up to 300 °C (572 °F) and for short excursions to as high as 500 °C (932 °F).
- Low wear and friction at high pressures and velocities (lubricated or unlubricated)
- Outstanding creep resistance
- Strength and impact resistance
- Exceptional chemical resistance
- Excellent machinability

Vespel® shapes enable superior performance in demanding physical environments, where metals or ceramics may not meet your specification.

As an alternative to metals, Vespel® shapes offer:

- Reduced weight
- Design flexibility
- Less wear

As an upgrade from ceramics, Vespel® shapes offer:

- Increased ease of machinability
- Impact resistance
- Low design cost

Unlike other high performance engineered plastics, Vespel® shapes offer:

- Higher temperature compatibility
- Creep resistance
- Better wear and friction

Specify the most suitable DuPont™ Vespel® product to meet your application requirements

For more than 50 years, DuPont™ Vespel® parts and shapes have delivered innovative solutions for demanding applications.

Vespel® SP-1 for physical and electrical properties

- superior wear, maximum strength and elongation
- minimal electrical and thermal conductivity
- low outgassing with high purity

Vespel® SP-3 for unlubricated sealing and low wear in vacuum or dry environments

- maximum wear and friction resistance
- ultra-low outgassing

Vespel® SP-21 for balanced low wear and physical properties

- low-friction properties work with or without lubrication
- long elongation and high stiffness

Vespel® SP-211 for low coefficient of friction and unlubricated wear

- lower coefficient of friction even without lubrication than SP-21
- excellent creep resistance

Vespel® SP-22 for low wear and dimensional stability

- enhanced resistance to wear and friction
- minimal thermal expansion
- oxidative stability

Vespel® SP-202 for electrical conductivity with low wear rates

- electrostatic charge removal
- maintains tolerances in high heat and through multiple cycles

Vespel® SCP-5000 for strength and hardness

- chemical resistance over broad temperature range
- high wear resistance with low outgassing and high purity
- thermal oxidative stability

Vespel® SCP-5009 for high temperatures and excellent compressive strength

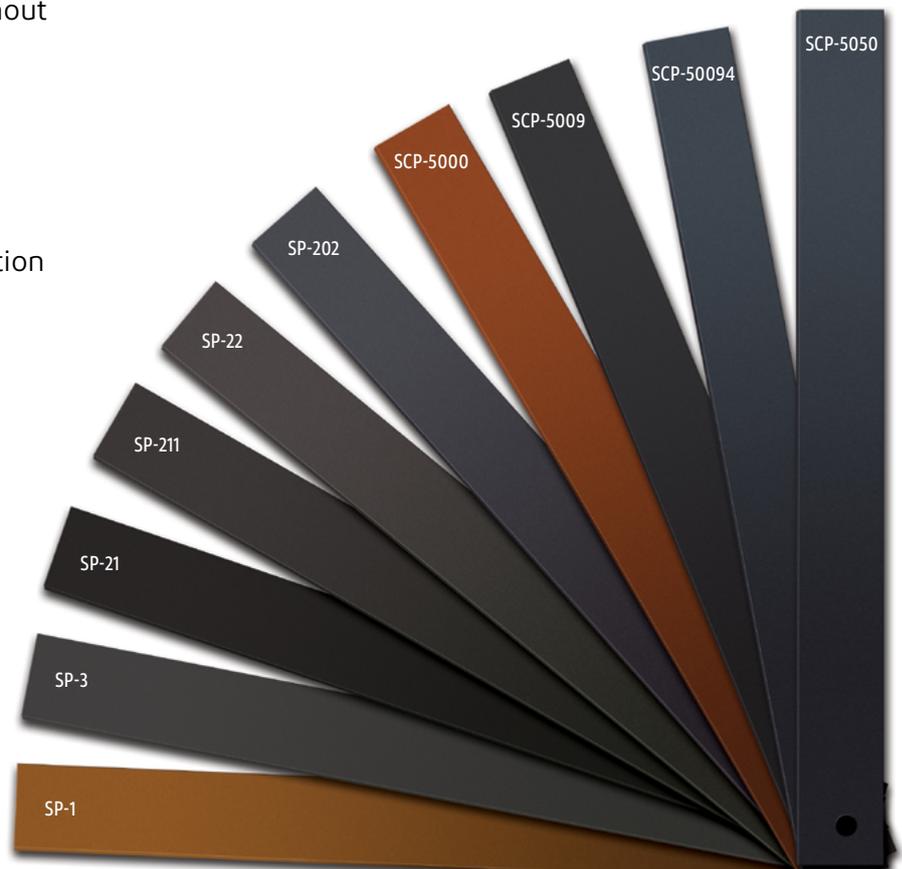
- lower coefficient of friction without lubrication
- excellent sealing capability

Vespel® SCP-50094 for high temperatures and wear resistance

- superior wear
- thermal oxidative stability

Vespel® SCP-5050 for high temperatures, wear resistance and exceptional coefficient of friction

- improved high temperature and wear resistance
- coefficient of thermal expansion similar to steel



Specify Authentic DuPont™ Vespel® shapes

Authentic DuPont™ Vespel® shapes are a combination of material composition, geometric size/shape and process method. They are manufactured only by DuPont and sold only through authorized distributors of DuPont™ Vespel®. The DuPont™ Vespel® parts and shapes business uses compression and isostatic molding methods to manufacture shapes. These two methods produce shapes with different properties. For example, a rod machined from compression molded plaque will not perform the same as a rod produced by isostatic molding. Therefore, it is essential that you ensure you are getting the product you require or performance may suffer.

We do not guarantee availability of the specified shapes in all the stated sizes below. For example, an OD range of 165–470 mm (6.5–18.5 in) does not imply that any OD within this range is available for sale. Contact an authorized distributor if you require any of the sizes below or if you have other size requirements.

Vespel® S Family Sizes

Shape	Grade	Size Range*
Rod**	SP-1, SP-21, SP-22, SP-211 and SP-3	OD: 3.1-82.5 mm (0.125-3.25 in) Max. Length: 965.2 mm (38 in)
	SCP-5009, SCP-50094 and SCP-5050	SCP-5009: OD: 6.3-38.1 mm (0.25-1.5 in) SCP-50094: OD: 6.3-50.8 mm (0.25-2 in) SCP-5050: OD: 6.3-82.5 mm (0.25-3.25 in) Max. Length: 914.4 mm (36 in)
	SCP-5000	OD: 6.3-69.8 mm (0.25-2.75 in) Max. Length: 482.6 mm (19 in)
Tube	SP-1, SP-21, SP-22, SP-211 and SP-3	OD: 40.6-317.5 mm (1.6-12.5 in) ID: 27.9-266.7 mm (1.1-10.5 in) Max. Length: 838.2 mm (33in)
Plaque Square**	SP-1, SP-21, SP-22, SP-211, SP-3 and SP-202	Max. Size: 254 x 254 mm (10 x 10 in) Max. Thickness: 50.8 mm (2 in)
Plaque Disk	SP-1	OD: 165.1-469.9 mm (6.5-18.5 in) Thickness: 22-59.8 mm (0.87-2.35 in)
	SCP-5000	OD: 215.9-414 mm(8.5-16.3 in) Thickness: 25-46 mm (.98-1.8 in)
Plaque Ring	SP-1, SP-21 and SCP-5000	OD: 125-545 mm (4.9-21.5 in) ID: 55.9-419.1 mm (2.2-16.5 in) Thickness: 1.2-63 mm (0.05-2.5 in)

*There are some special sizes available not included on this list. Not all sizes listed are available in all grades

**Rods and square plaque are available through distribution.

Visit us at vespel.com



1-888-CURBELL
www.curbellplastics.com

Curbell Plastics is an Authorized Distributor of
DuPont™ Vespel® Parts and Shapes.

The information set forth herein is furnished free of charge, is based on technical data that DuPont believes to be reliable and represents typical values that fall within the normal range of properties. This information relates only to the specific material designated and may not be valid for such material used in combination with other materials or in other processes. It is intended for use by persons having technical skill, at their own discretion and risk. This information should not be used to establish specification limits nor used alone as the basis of design. Handling precaution information is given with the understanding that those using it will satisfy themselves that their conditions of use present no health or safety hazards and comply with applicable law. Since conditions of product use and disposal are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information. As with any product, evaluation under end use conditions prior to specification is essential. Nothing herein is to be taken as a license to operate or a recommendation to infringe on patents.

CAUTION: Do not use DuPont materials in medical applications involving implantation in the human body or contact with internal body fluids or tissues unless the material has been provided from DuPont under a written contract that is consistent with the DuPont policy regarding medical applications and expressly acknowledges the contemplated use. For further information, please contact your DuPont representative.

DuPont's sole warranty is that our products will meet our standard sales specifications in effect at the time of shipment. Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted. TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, DUPONT SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, OR NON INFRINGEMENT. DUPONT DISCLAIMS LIABILITY FOR ANY SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES.

DuPont™, the DuPont Oval Logo, and all trademarks and service marks denoted with ™, ® or ® are owned by affiliates of DuPont de Nemours, Inc. unless otherwise noted. © 2022 DuPont. All rights reserved.

Form No.VPE-A40083-00-B1022 DCP



dupont.com