ASCEND PERFORMANCE MATERIALS

application profile:
aerosol valves

Vydyne® PA66 compounds have been specified in consumer and industrial applications for many years. Plastic components in these applications require excellent chemical resistance, strength and ductility for repeated use. They also must demonstrate superior mechanical and thermal performance while maintaining dimensional integrity. The performance, quality and consistency of our products make the difference in your applications.

Product Used: 21SPG1, 20NSP1, 21SPF

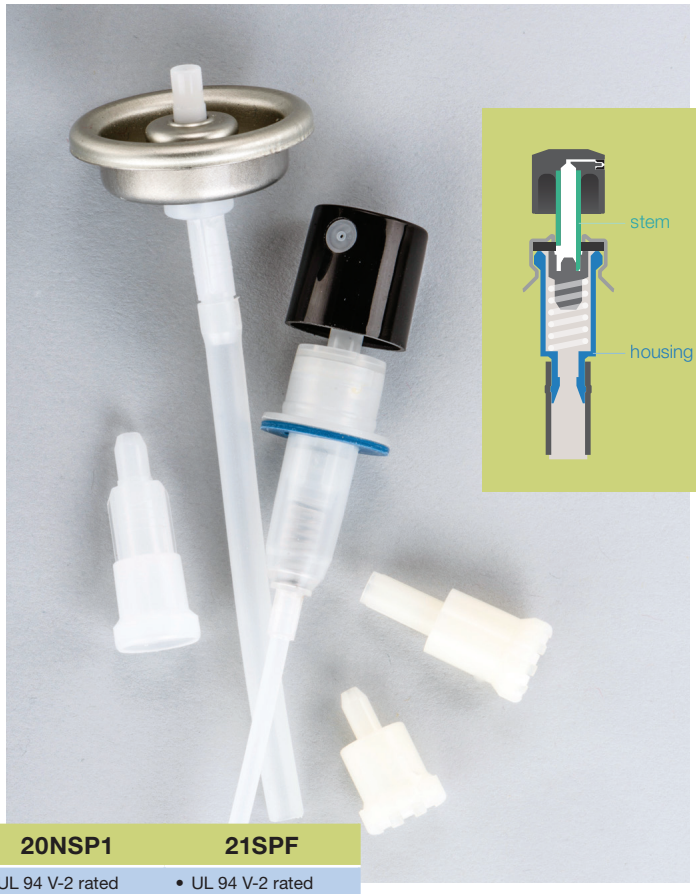
For more information, see your Ascend representative or visit www.ascendmaterials.com.

Key Material Performance

- Excellent chemical resistance
- High mechanical strength
- Good ductility (deform under stress)
- Dimensional stability
- High productivity

Application Description

An aerosol valve contains a stem and housing that are critical components of the dispensing system. In this application, PA66 offers dimensional control and stability. Aerosol containers are used to dispense many types of products, and PA66 provides excellent resistance across a broad range of chemicals. Aerosol components made with Vydyne PA66 provide an excellent balance of good stiffness and toughness, which is critical during valve assembly and final product use. Vydyne solutions for aerosol valves range from general-purpose PA66 to highly nucleated, specialty lubricated solutions offering the highest productivity.



The Vydyne Solution

Product			21SPG1	20NSP1	21SPF
Characteristics			• UL 94 V-2 rated • Mold release • High productivity • Improved toughness • Chemical resistance • Food compliant	• UL 94 V-2 rated • Mold release • Highest productivity • Chemical resistance • Food compliant	• UL 94 V-2 rated • Mold release • Good productivity • Toughness • Chemical resistance • Food compliant
Property	**Test Method**	**Units**	**DAM**	**DAM**	**DAM**
Density	ISO 1183	g/cm³	1.14	1.14	1.14
Tensile Stress	ISO 527	MPa	88	95	88
Elongation at Break	ISO 527	%	20	13	20
Tensile Modulus	ISO 527	MPa	3,200	3,800	3,300
Notched Izod	ISO 180 (23°C)	kJ/m²	6.0	6.0	6.0

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