TPSiV® 5300 A6002

SILICONE THERMOPLASTIC ELASTOMER

When you combine the strength, toughness, and abrasion resistance of thermoplastic elastomer with the soft silkiness, UV and chemical resistance, and colorability of silicone, you get DuPont™ TPSiV®. Durable, yet both silky and non-tacky (dirt-resistant), TPSiV® delivers exceptional performance and aesthetics.
TPSiV® products incorporate vulcanized silicone in a thermoplastic matrix and can be customized for specific applications and can be recycled and reused in your manufacturing processes. This makes them remarkably versatile and reliable for a wide range of applications.

TPSiV® 5300 A6002 thermoplastic elastomer is a low odor, plasticiser-free thermoplastic elastomer with excellent bonding to polypropylene and polyethylene. It is a product targeted for soft touch overmoulding on wearable electronic devices, industrial and sports & leisure applications.

Rheological properties

Flow length	180	mm
Flow length - pressure	8	MPa

Typical mechanical properties

Stress at 100% elongation	1.9	MPa	ISO 527-1/-2 or ISO 37
Stress at break	7.4	MPa	ISO 527-1/-2 or ISO 37
Elongation at break	>300	%	ISO 527-1/-2 or ISO 37
Shore A hardness, 15s	60		ISO 48-4 / ISO 868
Tear strength, normal	44	kN/m	ISO 34-1

[1]: Cross direction

Other properties

Density	920	kg/m³	ISO 1183

Injection

Drying Recommended	no	
Mold Temperature Optimum	30	°C
Min. mould temperature	28	°C
Max. mould temperature	32	°C

Extrusion

Melt Temperature Optimum	190	°C
Melt Temperature Range	180 - 200	°C

Characteristics

Compatibility	Polyolefins

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Additional information

How to use	TPSiV® 5300 elastomers products can be manufactured using standard thermoplastic manufacturing processes, including overmolding and co-molding; extrusion and co-extrusion with polyolefine plastic substrates. TPSiV® elastomers self-adhere to hard plastics to enable unique overmolding options. The extremely silky feel of TPSiV elastomers does not require additional processing or coating steps.

DuPont

Please refer to DuPont Medical Application Policy before any use of DuPont material in a medical application- Position Statements | DuPont .

Do not use DuPont products in medical application involving permanent implantation (more than 29 days) in the human body or contact with internal body fluids or tissues (for more than 29 days) unless the product 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.

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