VECTOR® 4461

Styrene Butadiene Styrene Block Copolymer Dexco Polymers LP

Message:

VECTOR 4461

Styrene-Butadiene-Styrene (SBS) Block Copolymer

SBS(1) triblock copolymer.

Contains <1% diblock copolymer.

High styrene, high melt flow block copolymer.

Supplied as a porous pellet, dusted with talc.

VECTOR styrenic block copolymers find use under certain regulations as articles or as ingredients in articles intended for food contact or medical applications. Please contact your Dexco Polymers agent for a detailed letter of certification or further information.

VECTOR 4461 linear, pure SBS block copolymer is produced via proprietary sequential anionic polymerization technology from Dexco Polymers LP, a Dow/ExxonMobil Venture. It is formulated with the antioxidant TNPP (tris(nonylphenyl) phosphite).

It has the lowest elasticity of the SBS family of products while providing high modulus, low creep resistance, excellent cohesive strength, and good melt processability. It is particularly suited for hot melt adhesives requiring high strength and low viscosity.

Features Food Contact Acceptable Good Creep Resistance Good Processability High Flow High Strength Low Viscosity Porous Uses Adhesives Forms Pellets Physical Nominal Value Unit Test Method Specific Gravity 0.958 Melt Mass-Flow Rate (MFR) (200°C/5.0 kg) 8.23 Melt Mass-Flow Rate (MFR) (200°C/5.0 kg) 850 Melt Mass-Flow Rate (MFR) (200°C/5.0 kg) 850 Men Men Mass-Flow Rate (MFR) (200°C/5.0 kg) 850 Men Men Mass-Flow Rate (MFR) (200°C/5.0 kg) 850 Men Men Mass-Flow Rate (MFR) (200°C/5.0 kg) Resident Men	General Information			
Good Creep Resistance Good Processability High Flow High Strength Low Viscosity Porous Uses Adhesives Forms Pellets Physical Nominal Value Unit Test Method Solution Viscosity 850 Meth Mass-Flow Rate (MFR) (200°C/50 kg) 850 Meth Mass-Flow Ra	Additive	Antioxidant		
Good Processability High Flow High Strength Low Viscosity Porous Uses Adhesives Forms Pellets Physical Nominal Value Unit Test Method Specific Gravity 0.958 g/cm³ ASTM D2128 Solution Viscosity 850 mPa·s ASTM D2196 Ash Content 0.5 www. ASTM D2196 Ash Content 43.0 www. Internal Method Diblock Content 41.0 www. Www. Internal Method Diblock Content 41.0	Features	Food Contact Acceptable		
High Flow High Strength Low Viscosity Porous		Good Creep Resistance		
High Strength Low Viscosity Porous		Good Processability		
Low Viscosity Porous Uses Adhesives Forms Pellets Physical Nominal Value Unit Test Method Specific Gravity 0.958 g/cm³ ASTM D792 Melt Mass-Flow Rate (MFR) (200°C/5.0 kg) 2.3 g/10 min ASTM D1238 Solution Viscosity 850 mPa·s ASTM D2196 ASTM D2196 ASH Content 0.5 wt% ASTM D1415 Styrene Content 43.0 wt% Internal Method Diblock Content 43.0 wt% Internal Method Diblock Content 43.0 wt% Internal Method Diblock Content Volatiles Nominal Value Unit Test Method Durometer Hardness (Shore A, 1 sec) 87 Unit Test Method Durometer Hardness (Shore A, 1 sec) 87 Mominal Value Unit Test Method Tensile Stress¹ (300% Strain, 25°C) 8.27 MPa ASTM D412 Tensile Strength² (Yield, 25°C) 31.0		High Flow		
		High Strength		
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Pellets Physical Nominal Value Unit Test Method Specific Gravity 0.958 g/cm³ ASTM D792 Melt Mass-Flow Rate (MFR) (200°C/5.0 kg) 2.3 g/10 min ASTM D1238 Solution Viscosity 850 mPa·s ASTM D2196 Ash Content 0.5 wt% ASTM D1415 Styrene Content 43.0 wt% Internal Method Diblock Content < 1.0 wt% Internal Method Volatiles 0.4 wt% Internal Method Hardness Nominal Value Unit Test Method Durometer Hardness (Shore A, 1 sec) 87 Elastomers Nominal Value Unit Test Method Tensile Stress¹ (300% Strain, 25°C) 8.27 MPa ASTM D412 Tensile Strength² (Yield, 25°C) 31.0 MPa ASTM D412				
Physical Nominal Value Unit Test Method Specific Gravity 0.958 g/cm³ ASTM D792 Melt Mass-Flow Rate (MFR) (200°C/5.0 kg) 2.3 g/10 min ASTM D1238 Solution Viscosity 850 mPa·s ASTM D2196 Ash Content 0.5 wt% ASTM D1415 Styrene Content 43.0 wt% Internal Method Diblock Content < 1.0	Uses	Adhesives		
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Ash Content 0.5 wt% ASTM D1415 Styrene Content 43.0 wt% Internal Method Diblock Content < 1.0 wt% Internal Method Volatiles 0.4 wt% Internal Method Hardness Nominal Value Unit Test Method Durometer Hardness (Shore A, 1 sec) 87 ASTM D2240 Elastomers Nominal Value Unit Test Method Tensile Stress 1 (300% Strain, 25°C) 8.27 MPa ASTM D412 Tensile Strength 2 (Yield, 25°C) 31.0 MPa ASTM D412	Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	2.3	g/10 min	ASTM D1238
Styrene Content 43.0 wt% Internal Method Diblock Content < 1.0 wt% Internal Method Volatiles 0.4 wt% Internal Method Hardness Nominal Value Unit Test Method Durometer Hardness (Shore A, 1 sec) 87 ASTM D2240 Elastomers Nominal Value Unit Test Method Tensile Stress 1 (300% Strain, 25°C) 8.27 MPa ASTM D412 Tensile Strength 2 (Yield, 25°C) 31.0 MPa ASTM D412	Solution Viscosity	850	mPa·s	ASTM D2196
Diblock Content < 1.0 wt% Internal Method Volatiles 0.4 wt% Internal Method Hardness Nominal Value Unit Test Method Durometer Hardness (Shore A, 1 sec) 87 ASTM D2240 Elastomers Nominal Value Unit Test Method Tensile Stress 1 (300% Strain, 25°C) 8.27 MPa ASTM D412 Tensile Strength 2 (Yield, 25°C) 31.0 MPa ASTM D412	Ash Content	0.5	wt%	ASTM D1415
Volatiles 0.4 wt% Internal Method Hardness Nominal Value Unit Test Method Durometer Hardness (Shore A, 1 sec) 87 Elastomers Nominal Value Unit Test Method Tensile Stress 1 (300% Strain, 25°C) 8.27 MPa ASTM D412 Tensile Strength 2 (Yield, 25°C) 31.0 MPa ASTM D412	Styrene Content	43.0	wt%	Internal Method
Hardness Nominal Value Unit Test Method Durometer Hardness (Shore A, 1 sec) 87 ASTM D2240 Elastomers Nominal Value Unit Test Method Tensile Stress 1 (300% Strain, 25°C) 8.27 MPa ASTM D412 Tensile Strength 2 (Yield, 25°C) 31.0 MPa ASTM D412	Diblock Content	< 1.0	wt%	Internal Method
Durometer Hardness (Shore A, 1 sec) 87 Elastomers Nominal Value Unit Test Method Tensile Stress 1 (300% Strain, 25°C) 8.27 MPa ASTM D412 Tensile Strength 2 (Yield, 25°C) 31.0 MPa ASTM D412	Volatiles	0.4	wt%	Internal Method
Elastomers Nominal Value Unit Test Method Tensile Stress ¹ (300% Strain, 25°C) 8.27 MPa ASTM D412 Tensile Strength ² (Yield, 25°C) 31.0 MPa ASTM D412	Hardness	Nominal Value	Unit	Test Method
Tensile Stress ¹ (300% Strain, 25°C) 8.27 MPa ASTM D412 Tensile Strength ² (Yield, 25°C) 31.0 MPa ASTM D412	Durometer Hardness (Shore A, 1 sec)	87		ASTM D2240
Tensile Strength ² (Yield, 25°C) 31.0 MPa ASTM D412	Elastomers	Nominal Value	Unit	Test Method
	Tensile Stress ¹ (300% Strain, 25°C)	8.27	MPa	ASTM D412
Tensile Elongation ³ (Break, 25°C) 700 % ASTM D412	Tensile Strength ² (Yield, 25°C)	31.0	MPa	ASTM D412
	Tensile Elongation ³ (Break, 25°C)	700	%	ASTM D412

1.	25 Wt. % in toluene
2.	25 Wt. % in toluene
3	25 Wt % in toluene

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