

Technical Data Sheet

Centrex ST4800

Acrylonitrile Styrene Acrylate + TPE

LyondellBasell Industries

Engineering Plastics

General			
Features	- Chemical Resistant - Durable - Good Weather Resistance	- Low Gloss - Soft - Sound Damping	UV Resistant
Uses	- Agricultural Applications - Automotive Instrument Panel	- Automotive Interior Parts - Marine Applications	- Outdoor Applications - Thermoforming Applications
Agency Ratings	EC 1907/2006 (REACH)	EU 2002/96/EC (WEEE)	
RoHS Compliance	RoHS Compliant		
Appearance	Colors Available		
Forms	Pellets		
Processing Method	Coextrusion	Sheet Extrusion	Thermoforming

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.06	1.06 g/cm ³	ASTM D792A
Melt Mass-Flow Rate (MFR)			ASTM D1238
220°C/10.0 Kg	51 g/10 min	51 g/10 min	
230°C/2.16 Kg ¹	5.4 g/10 min	5.4 g/10 min	
230°C/3.8 Kg	15 g/10 min	15 g/10 min	

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus ² (75°F (24°C))	45400 psi	313 MPa	ASTM D638
Tensile Strength ³ (Break)	1950 psi	13.5 MPa	ASTM D638
Tensile Elongation ³ (Break, 75°F (24°C))	100 %	100 %	ASTM D638
Flexural Modulus - Chord ⁴			ASTM D790
75°F (24°C), 2.00 In (50.8 Mm) Span	45600 psi	314 MPa	

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact			ASTM D256
-22°F (-30°C)	2.9 ft·lb/in	160 J/m	
75°F (24°C)	5.8 ft·lb/in	310 J/m	
Instrumented Dart Impact			ASTM D3763
74°F (23°C), Maximum Energy	53.1 in·lb	6.00 J	
74°F (23°C), Total Energy	70.8 in·lb	8.00 J	

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore D)	43	43	ASTM D2240

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 Psi (0.45 Mpa), Unannealed	155 °F	68.1 °C	
264 Psi (1.8 Mpa), Unannealed	114 °F	45.5 °C	
Vicat Softening Temperature			
--	148 °F	64.5 °C	ASTM D1525 ⁵
--	92.7 °F	33.7 °C	ASTM D1525 ⁶

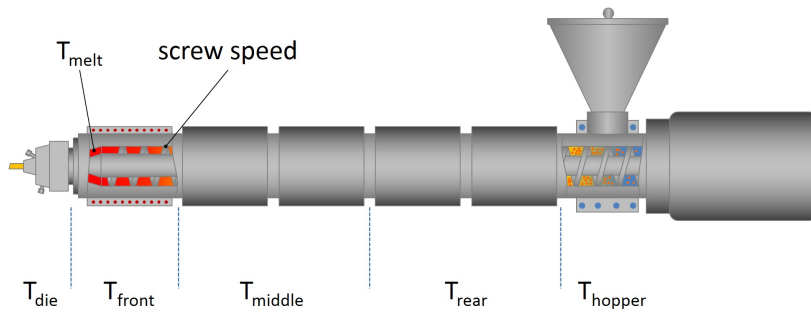
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Burning Rate	1.7 in/min	42 mm/min	ISO 3795

Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gloss			ASTM D523
60°, 50.0 Mil (1270 µm), Extruded Sheet	10	10	

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Extrusion	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	160 °F	71 °C
Drying Time	4.0 to 6.0 hr	4.0 to 6.0 hr
Suggested Max Moisture	< 0.10 %	< 0.10 %
Suggested Max Regrind	15 %	15 %
Cylinder Zone 1 Temp.	350 °F	177 °C
Cylinder Zone 2 Temp.	360 °F	182 °C
Cylinder Zone 3 Temp.	370 °F	188 °C
Cylinder Zone 4 Temp.	375 °F	191 °C
Melt Temperature	350 to 400 °F	177 to 204 °C
Die Temperature	400 to 425 °F	204 to 218 °C
Take-Off Roll	160 to 180 °F	71 to 82 °C

Extrusion Notes

Minimum suggested cap thickness of 20 mils after thermoforming.

Notes

¹ Procedure A

² 0.039 in/min (1.0 mm/min)

³ 2.0 in/min (50 mm/min)

⁴ 0.051 in/min (1.3 mm/min)

⁵ Rate A (50°C/h), Loading 1 (10 N)

⁶ Rate A (50°C/h), Loading 2 (50 N)

Notes

These are typical property values not to be construed as specification limits.