THERMOLAST® K TF9FMA (Series: FC/AD1)

Thermoplastic Elastomer

KRAIBURG TPE

Message:

The FC/AD1 Series is your material solution for applications with food contact providing excellent adhesion to polar thermoplastics such as PC, ABS and PETG. Typical applications Function and design elements Grip applications

Household articles Packaging (for food and careproducts) Razors Seals Toothbrushes Toys Material advantages Applications with food contact Code of Federal Regulations, Title 21 (CFR 21) "FDA" Easy coloring (compounds in natural colors) EN71/3 Excellent adhesion Excellent processing behavior Halogen-free Regulation (EU) No. 10/2011

General Information	
Features	Food Contact Acceptable
	Good Adhesion
	Good Colorability
	Good Processability
	Halogen Free
Uses	Food Packaging
	Household Goods
	Non-specific Food Applications
	Packaging
	Seals
	Toothbrush Handles
	Toys
Agency Ratings	EN 71-3
	EU 10/2011
	FDA Food Contact, Unspecified Rating
Appearance	Natural Color
Processing Method	Injection Molding

Physical Nominal Value Unit Test Method Density 1.10 g/cm³ ISO 1183 Hardness Nominal Value Unit Test Method Shore Hardness (Shore A) 87 ISO 7619 Elastomers Nominal Value Unit Test Method Tensile Stress ¹ (Yield) 11.5 MPa ISO 37 Tensile Elongation ² (Break) 750 % ISO 37 Tear Strength ³ 40 kN/m ISO 34-1 Additional Information Nominal Value Unit Test Method Adhesion to ABS 20.0 kN/m Renault D41/1916 Adhesion to PC 35.0 kN/m Renault D41/1916 Injection Nominal Value Unit Test Method Drying Temperature 60.0 to 80.0 *C Test Method Injection Nominal Value Unit Test Method Middle Temperature 180 *C Test Method Middle Temperature 2.0 to 4.0 *C Test Method					
HardnessNominal ValueUnitTest MethodShore Hardness (Shore A)87ISO 7619ElastomersNominal ValueUnitTest MethodTensile Stress ¹ (Yield)11.5MPaISO 37Tensile Elongation ² (Break)750%ISO 37Tear Strength ³ 40kN/mISO 34-1Additional InformationNominal ValueUnitTest MethodAdhesion to ABS20.0kN/mRenault D41/1916Adhesion to PC35.0kN/mRenault D41/1916InjectionNominal ValueUnitUnitDrying Temperature60.0 to 80.0*CDrying Time2.0 to 4.0hrRear Temperature180*CMiddle Temperature240*CMold Temperature20.0 to 10.0MPaBack Pressure2.0 to 10.0MPaNOTE1.Type S2, 200 mm/min2.Type S2, 200 mm/min	Physical	Nominal Value	Unit	Test Method	
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Tensile Elongation ² (Break) 750 % ISO 37 Tear Strength ³ 40 kN/m ISO 34-1 Additional Information Nominal Value Unit Test Method Adhesion to ABS 20.0 kN/m Renault D41/1916 Adhesion to PC 35.0 kN/m Renault D41/1916 Injection Nominal Value Unit Test Method Drying Temperature 60.0 to 80.0 °C Test Drying Time 2.0 to 4.0 hr Test Rear Temperature 180 °C Test Middle Temperature 240 °C Test Middle Temperature 2.0 to 10.0 MPa Test Back Pressure 2.00 to 10.0 MPa Test Drype S2, 200 mm/min Type S2, 200 mm/min Test S2, 200 mm/min Test S2, 200 mm/min	Elastomers	Nominal Value	Unit	Test Method	
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Adhesion to PC35.0kN/mRenault D41/1916InjectionNominal ValueUnitDrying Temperature60.0 to 80.0°CDrying Time2.0 to 4.0hrRear Temperature180°CMiddle Temperature210°CFront Temperature240°CMold Temperature40.0 to 60.0°CInjection Pressure20.0 to 100MPaBack Pressure2.00 to 10.0MPa1.Type S2, 200 mm/min2.Type S2, 200 mm/min	Additional Information	Nominal Value	Unit	Test Method	
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Injection Pressure 20.0 to 100 MPa Back Pressure 2.00 to 10.0 MPa NOTE	Front Temperature	240	°C		
Back Pressure 2.00 to 10.0 MPa NOTE 1. Type S2, 200 mm/min 2. Type S2, 200 mm/min	Mold Temperature	40.0 to 60.0	°C		
NOTE 1. Type S2, 200 mm/min 2. Type S2, 200 mm/min	Injection Pressure	20.0 to 100	MPa		
Type S2, 200 mm/min 2. Type S2, 200 mm/min	Back Pressure	2.00 to 10.0	MPa		
2. Type S2, 200 mm/min	NOTE				
	1.	Type S2, 200 mm/min	Type S2, 200 mm/min		
3. Method Bb, Angle (Nicked)	2.	Type S2, 200 mm/min	Type S2, 200 mm/min		
	3.	Method Bb, Angle (Nicked)	Method Bb, Angle (Nicked)		

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