# Hyflon® MFA® F1540

## Perfluoropolymer

Solvay Specialty Polymers

### Message:

Hyflon® MFA® is a unique family of perfluoro polymers which combine excellent mechanical characteristics to unique properties such as chemical inertness, high flexural endurance, inherent flame resistance, low surface energy and exceptional dielectric properties.

Hyflon® MFA® F1540 is a medium-high melt flow rate multi purpose resin with an exceptional stress crack resistance, continuous service temperature up to 225°C and a 13-15 x 10<sup>3</sup> cycles flex-life (on a 0.3 mm film, ASTM D2176).

UL VellowCard   E109081-100037832     Features   High ESCR (Stress Cracking Resistance)     High liquidity   Fame retardancy     Uses   Wire and cable applications     General   General     ROHS Compliance   RoHS compliance     Forms   Particle     Processing Method   Extrusion coating     Physical   Nominal Value   Unit     Particle   10-2.15   g/cm³     Physical   Nominal Value   Unit     Meth Mass-Flow Rate (MFR) (372°C/s Log)   8.0 - 18   g/10 min     Methodus <sup>1</sup> (23°C)   8.0 - 18   g/10 min   ASTM D792     Methodus <sup>1</sup> (23°C)   9.5 - 60   Kest Method   10-240     Durometer Hardness   Nominal Value   Unit   Test Method     Durometer Hardness (Shore D)   55 - 60   XESTM D2320   ASTM D2307     Tensile Modulus <sup>1</sup> (23°C)   400 - 500   MPa   ASTM D3307     Tensile Strength <sup>2</sup> (Break, 23°C)   > 25.0   Ma   ASTM D3307     Tensile Elongation <sup>3</sup> (Break, 23°C)   > 300   %   ASTM D3307     Heat of rystalization   160 - 24.0   /	General Information			
Hghliquidity Rame retardancyUsesKire and cable applications GeneralRefS ComplianceRefS complianceFormsRefS complianceProtesFormalProtesKire and cable applications GeneralProtesRefS complianceProtesRefS complianceProtesKire and cable applications GeneralProtesRefS complianceProtesRefS complianceProtesSector<	UL YellowCard	E109081-100037832		
Pame retridency     Providence     Providence     Secondal       Res     Res     Secondal     Secondal       Roth Compliance     Retridence     Secondal     Secondal       Protes     Retridence     Secondal     Secondal       Protes     Secondal     Internet     Secondal       Protes     Secondal     Secondal     Secondal       Special Gravity     Secondal     Internet     Secondal       Met Mass-Flow Retridency (Stord D)     Secondal     Secondal     AsTM D728       Met Mass-Flow Retridency (Stord D)     Secondal     Internet     Secondal       Met Mass-Flow Retridency (Stord D)     Secondal     Internet     Secondal       Methans-Flow Retridency (Stord D)     Secondal     Internet     Secondal       Methans-Flow Retridency (Stord D)     Secondal     Internet     Secondal       Testie Moduls <sup>1</sup> (Stord C)     Secondal     Internet     Secondal       Secondal Flow Retridency (Stord D)     Secondal     Internet     Secondal       Secondal Flow Retridency (Stord D)     Secondal     Internet     Secondal </td <td>Features</td> <td>High ESCR (Stress Cracking Resista</td> <td>nce)</td> <td></td>	Features	High ESCR (Stress Cracking Resista	nce)	
New SectionWir and cable applications GeneralRoHS ComplianceRoHS complianceFormsRoHS complianceFormsParticleProcessing MethodExtrusion coatingPhysicalNominal ValueUnit noSpecific Gravity2.1 - 2.15Methadss-Flow Rate (MFR) (372°/C50.00)8.1 - 18Morinal ValueUnit noStat D1238ParticleSocial1010minSpecific Gravity5 60Vinit noMethadss-Flow Rate (MFR) (372°/C50.00)5 60Vinit noMethadsset Store NameSocial1010minDaroneer Hardness (Shore D)5 60Vinit noMethadoulus 1 (23°/C)25.0 CMPaStore Store S		High liquidity		
GeneralRolS complianceFormsRolS complianceForessing MethodFortionProcessing MethodNormal ValuePhysicalNormal ValueSpecific Gravity2.10-2.15Method Sace MethodGravitaMethod Sace Method Sace MethodJourninMethod Sace Method Sace Method Sace MethodGravitaDarometer Hardness (Shore Du5-60Methodaulus <sup>1</sup> (23°C)Sol Sace MethodMethodaulus <sup>1</sup> (23°C)Sol Sace MethodReise Robusti <sup>2</sup> (Break, 23°C)>25.0Methodaulus <sup>1</sup> (23°C)Sol Sace MethodRobusti <sup>2</sup> (Break, 23°C)>30.0Robusti <sup>2</sup> (Break, 23°C)Sol Sace MethodRobusti <sup>2</sup> (Break, 23°C)>10.0Robusti <sup>2</sup> (Break, 23°C)Sol Sace MethodRobusti <sup>2</sup> (Break, 23°C)>10.0Robusti <sup>1</sup> (Break, 23°C)Sol Sace MethodRobusti <sup>1</sup> (Break, 23°C)>10.0Robusti <sup>1</sup> (Break, 23°C)Sol Sace MethodRobusti <sup>1</sup> (Break, 23°C)Sol Sace Metho		Flame retardancy		
GeneralRolS complianceFormsRolS complianceForessing MethodFortionProcessing MethodNormal ValuePhysicalNormal ValueSpecific Gravity2.10-2.15Method Sace MethodGravitaMethod Sace Method Sace MethodJourninMethod Sace Method Sace Method Sace MethodGravitaDarometer Hardness (Shore Du5-60Methodaulus <sup>1</sup> (23°C)Sol Sace MethodMethodaulus <sup>1</sup> (23°C)Sol Sace MethodReise Robusti <sup>2</sup> (Break, 23°C)>25.0Methodaulus <sup>1</sup> (23°C)Sol Sace MethodRobusti <sup>2</sup> (Break, 23°C)>30.0Robusti <sup>2</sup> (Break, 23°C)Sol Sace MethodRobusti <sup>2</sup> (Break, 23°C)>10.0Robusti <sup>2</sup> (Break, 23°C)Sol Sace MethodRobusti <sup>2</sup> (Break, 23°C)>10.0Robusti <sup>1</sup> (Break, 23°C)Sol Sace MethodRobusti <sup>1</sup> (Break, 23°C)>10.0Robusti <sup>1</sup> (Break, 23°C)Sol Sace MethodRobusti <sup>1</sup> (Break, 23°C)Sol Sace Metho				
RelS ComplianceRelS complianceFormsParticleProcessing MethodExtrusion coatingPhysicalNominal ValueUnitPspecific Gravity2.10-2.15g/cm <sup>3</sup> Methodsare (MER) (372°C/5.00)8.0 18g/10 minASTM D792Methads-Flow Rate (MER) (372°C/5.00)5.60Test MethodDurmeter Hardness (Shore D)5.5-60Minal ValueMotical MethodMechanicalNominal ValueUnitTest MethodTensile Konduls <sup>1</sup> (28°C)400-500MPaASTM D307Tensile Storeght <sup>2</sup> (Break, 23°C)5.50MPaASTM D307Tensile Storeght <sup>2</sup> (Break, 23°C)5.00MPaASTM D307Tensile Storeght <sup>2</sup> (Break, 23°C)5.00MPaStoregotteTensile Storeght <sup>2</sup> (Break, 23°C)5.00MpaStoregotteRelding life <sup>4</sup> 0.5StoregotteMpaStoregotteHat of crystallization16.0-24.0MgaMSTM D307Relta of Fusion16.0-24.0MgaStoregotteRelta of Fusion80-41.0CaStoregotteRelta of Storegotte80-41.0CaStoregotte <t< td=""><td>Uses</td><td>Wire and cable applications</td><td></td><td></td></t<>	Uses	Wire and cable applications		
FormsParticleProcessing MethodKatrusion coatingPhysicalNominal ValueUnitTest MethodSpecific Gravity2.10 - 2.15g/cm³ASTM D792Meth Mass-Flow Rate (MFR) (372°C/50.0g)8.0 - 18g/10 minASTM D238HardnessNominal ValueUnitTest MethodDurometer Hardness (Shore D)55 - 60STM D234ASTM D2240MechanicalNominal ValueUnitTest MethodTensile Modulus <sup>1</sup> (23°C)400 - 500MPaASTM D3307Tensile Strength <sup>2</sup> (Break, 23°C)> 25.0MPaASTM D3307Tensile Elongation <sup>3</sup> (Break, 23°C)> 300% GalesASTM D3307Bending life <sup>4</sup> 0.62 + 4.0.62 + 4.0.KylMSTM D3307Heat of crystallization16.0 - 24.0J/gDSCFlange temperature30.4.0.0C-Cross nose temperature120°C-Sted wire preheating120°C-InpactNominal ValueUnitTest MethodCharpy Notched Inpact StrengthNe ReakC-TermalNominal ValueInitTest MethodHeting TemperatureSominal ValueInitTest MethodHeting TemperatureKominal ValueInitTest MethodHeting TemperatureNominal ValueInitTest MethodHeting TemperatureSominal ValueInitTest MethodHeting TemperatureNominal ValueInitTest MethodHeti		General		
FormsParticleProcessing MethodKatrusion coatingPhysicalNominal ValueUnitTest MethodSpecific Gravity2.10 - 2.15g/cm³ASTM D792Meth Mass-Flow Rate (MFR) (372°C/50.0g)8.0 - 18g/10 minASTM D238HardnessNominal ValueUnitTest MethodDurometer Hardness (Shore D)55 - 60STM D234ASTM D2240MechanicalNominal ValueUnitTest MethodTensile Modulus <sup>1</sup> (23°C)400 - 500MPaASTM D3307Tensile Strength <sup>2</sup> (Break, 23°C)> 25.0MPaASTM D3307Tensile Elongation <sup>3</sup> (Break, 23°C)> 300% GalesASTM D3307Bending life <sup>4</sup> 0.62 + 4.0.62 + 4.0.KylMSTM D3307Heat of crystallization16.0 - 24.0J/gDSCFlange temperature30.4.0.0C-Cross nose temperature120°C-Sted wire preheating120°C-InpactNominal ValueUnitTest MethodCharpy Notched Inpact StrengthNe ReakC-TermalNominal ValueInitTest MethodHeting TemperatureSominal ValueInitTest MethodHeting TemperatureKominal ValueInitTest MethodHeting TemperatureNominal ValueInitTest MethodHeting TemperatureSominal ValueInitTest MethodHeting TemperatureNominal ValueInitTest MethodHeti				
Processing MethodExtrusion coatingPhysicalNominal ValueUnitTest MethodSpecific Gravity2.10 - 2.15g/cm³ASTM D792Meth Mass-Flow Rate (MFR) (372°C/50.49)8.0 - 18g/10 minASTM D1238HardnessNominal ValueUnitTest MethodDurometer Hardness (Shore D)55 - 60XTM D1234MechanicalNominal ValueUnitTest MethodTensile Moduls <sup>1</sup> (23°C)400 - 500MPaASTM D3307Tensile Strength <sup>2</sup> (Break, 23°C)> 25.0MPaASTM D3307Tensile Elongation <sup>3</sup> (Break, 23°C)> 300%ASTM D3307Heat of crystallization16.0 - 24.0MyDSCHat of strength <sup>2</sup> (Break, 23°C)16.0 - 24.0MgDSCFinge temperature300 - 410°CSTGross nose temperature120°CStImpactNominal ValueUnitTest MethodCharpy Notched Impact StrengthNominal ValueVinitTest MethodImpactNominal ValueVinitTest MethodImpactNominal	RoHS Compliance	RoHS compliance		
PhysicalNominal ValueUnitTest MethodSpecific Gravity2.10 - 2.15g/cm³ASTM D792Melt Mass-Flow Rate (MFR) (372°C/50.kg)8.0 - 18g/10 minASTM D1238HardnessNominal ValueUnitTest MethodDurometer Hardness (Shore D)55 - 60ASTM D2240MechanicalNominal ValueUnitTest MethodTensile Modulus <sup>1</sup> (2°C)400 - 500MPaASTM D3307Tensile Strength <sup>2</sup> (Break, 23°C)> 25.0MPaASTM D3307Tensile Elongation <sup>3</sup> (Break, 23°C)> 300%ASTM D3307Bending life <sup>4</sup> 4.0E+4 - 6.0E+4CyclesASTM D2176Heat of crystallization160 - 24.0J/gDSCFlange temperature370 - 400°CSteel wire preheating120°CImpactNominal ValueUnitTest MethodCharpy Notchel Inpact StrengthNo BreakThermalNominal ValueUnitTest MethodMathodStrendHart of trystorter StrengthNo BreakTensile Elongature100 - 24.0UnitTest MethodGross nose temperature120°CImpactNominal ValueUnitTest MethodCharpy Notchel Inpact StrengthNo BreakThermalNominal ValueUnitTest MethodMathodStrend	Forms	Particle		
Specific Gravity2.10 - 2.15g/cm³ASTM D792Melt Mass-Flow Rate (MFR) (372°C/S.0 kg)8.0 - 18g/10 minASTM D1238HardnessNominal ValueUnitTest MethodDurometer Hardness (Shore D)55 - 60ASTM D2240MechanicalNominal ValueUnitTest MethodTensile Modulus <sup>1</sup> (23°C)400 - 500MPaASTM D3307Tensile Strength <sup>2</sup> (Break, 23°C)> 25.0MPaASTM D3307Tensile Strength <sup>2</sup> (Break, 23°C)> 300%ASTM D3307Tensile Gravity4.0E+4 - 6.0E+4CyclesASTM D2176Heat of crystallization16.0 - 24.0J/gDSCFlange temperature370 - 400°C-Cross nose temperature380 - 410°C-Steel wire preheating120°C-ImpactNominal ValueUnitTest MethodCharpy Notched Impact StrengthNo BreakThermalNominal ValueUnitTest MethodCharpy Notched Impact StrengthSine A; 275°C-Meting Temperature65 - 275°CASTM D307	Processing Method	Extrusion coating		
Melt Mass-Flow Rate (MFR) (372°C/5.0 kg)8.0 - 18g/10 minASTM D1238HardnessNominal ValueUnitTest MethodDurometer Hardness (Shore D)55 - 60MPaASTM D12240MechanicalNominal ValueUnitTest MethodTensile Modulus <sup>1</sup> (23°C)400 - 500MPaASTM D3307Tensile Strength <sup>2</sup> (Break, 23°C)> 25.0MPaASTM D3307Tensile Elongation <sup>3</sup> (Break, 23°C)> 300%ASTM D3307Bending life <sup>4</sup> 4.0E+4 - 6.0E+4CyclesASTM D3307Heat of crystallization16.0 - 24.0J/gDSCHeat of Fusion360 - 410J/gDSCFlange temperature380 - 410°C-Cross nose temperature380 - 410°C-Steel wire preheating120°C-ImpactNominal ValueUnitTest MethodCharpy Notched Impact StrengthNo BreakUnitTest MethodHermalNominal ValueUnitTest MethodHermalStrengtStrengtCThermalNominal ValueUnitTest MethodMeting Temperature56 - 275°CStrengt	Physical	Nominal Value	Unit	Test Method
HardnessNominal ValueUnitTest MethodDurometer Hardness (Shore D)55 - 60ASTM D2240MechanicalNominal ValueUnitTest MethodTensile Modulus <sup>1</sup> (23°C)400 - 500MPaASTM D3307Tensile Strength <sup>2</sup> (Break, 23°C)> 25.0MPaASTM D3307Tensile Elongation <sup>3</sup> (Break, 23°C)> 300% ASTM D3307Bending life <sup>4</sup> .0E+4 - 6.0E+4CyclesASTM D2176Heat of crystallization16.0 - 24.0J/gDSCHeat of Fusion16.0 - 24.0J/gDSCFlange temperature380 - 410°C-Steel wire preheating120°C-ImpactNominal ValueUnitTest MethodCharpy Notched Impact StrengthNo BreakUnitTest MethodHermalNominal ValueUnitTest MethodMeting TemperatureSec - 275°CASTM D3307	Specific Gravity	2.10 - 2.15	g/cm³	ASTM D792
Durometer Hardness (Shore D)     55 - 60     ASTM D2240       Mechanical     Nominal Value     Unit     Test Method       Tensile Modulus <sup>1</sup> (23°C)     400 - 500     MPa     ASTM D3307       Tensile Strength <sup>2</sup> (Break, 23°C)     > 25.0     MPa     ASTM D3307       Tensile Elongation <sup>3</sup> (Break, 23°C)     > 300     %     ASTM D3307       Bending life <sup>4</sup> .     .     .     .       Heat of crystallization     16.0 - 24.0     .     .     .       Heat of Fusion     16.0 - 24.0     .     .     .     .       Flange temperature     370 - 400     .     .     .     .     .       Stel wire preheating     .     .     .     .     .     .     .     .     .     .       Impact     Nominal Value     Unit     Test Method     .	Melt Mass-Flow Rate (MFR) (372°C/5.0 kg)	8.0 - 18	g/10 min	ASTM D1238
MechanicalNominal ValueUnitTest MethodTensile Modulus <sup>1</sup> (23°C)400 - 500MPaASTM D3307Tensile Strength <sup>2</sup> (Break, 23°C)> 25.0MPaASTM D3307Tensile Elongation <sup>3</sup> (Break, 23°C)> 300%ASTM D3307Bending life <sup>4</sup> 4.0E+4 - 6.0E+4CyclesASTM D2176Heat of crystallization16.0 - 24.0J/gDSCHeat of Fusion16.0 - 24.0J/gDSCFlange temperature370 - 400°C-Cross nose temperature380 - 410°C-ImpactNominal ValueUnitTest MethodCharpy Notched Impact StrengthNo BreakUnitTest MethodMeting TemperatureSominal ValueUnitTest MethodMeting TemperatureSominal ValueSec-Meting TemperatureSominal ValueSec-Meting TemperatureSominal ValueMainAstm D3307Meting TemperatureSominal ValueSec-Meting TemperatureSominal ValueMinial ValueAstm D3307	Hardness	Nominal Value	Unit	Test Method
Tensile Modulus <sup>1</sup> (23°C)400 - 500MPaASTM D3307Tensile Strength <sup>2</sup> (Break, 23°C)> 25.0MPaASTM D3307Tensile Elongation <sup>3</sup> (Break, 23°C)> 300%ASTM D3307Bending life <sup>4</sup> 4.0E+4 - 6.0E+4CyclesASTM D2176Heat of crystallization16.0 - 24.0J/gDSCHeat of Fusion16.0 - 24.0J/gDSCFlange temperature370 - 400°C-Cross nose temperature380 - 410°C-Steel wire preheating120°C-ImpactNominal ValueUnitTest MethodCharpy Notched Impact StrengthNominal ValueUnitTest MethodMenal265 - 275°CASTM D3307	Durometer Hardness (Shore D)	55 - 60		ASTM D2240
Tensile Strength <sup>2</sup> (Break, 23°C)> 25.0MPaASTM D3307Tensile Elongation <sup>3</sup> (Break, 23°C)> 300%ASTM D3307Bending life <sup>4</sup> 4.0E+4 - 6.0E+4CyclesASTM D2176Heat of crystalization16.0 - 24.0J/gDSCHeat of Fusion16.0 - 24.0J/gDSCFlange temperature370 - 400°CSCCross nose temperature380 - 410°CSCSteel wire preheating120°CSCImpactNominal ValueUnitTest MethodCharpy Notched Impact StrengthNo BreakUnitTest MethodMeting Temperature265 - 275°CSC	Mechanical	Nominal Value	Unit	Test Method
Tensile Elongation <sup>3</sup> (Break, 23°C)> 300% Momental MathematicaASTM D3307Bending life <sup>4</sup> 4.0E4 + 6.0E + 4CyclesASTM D2176Heat of crystallization16.0 - 24.0J/gDSCHeat of Fusion16.0 - 24.0J/gDSCFlange temperature370 - 400°C-Cross nose temperature380 - 410°C-Steel wire preheating120°C-ImpactNominal ValueUnitTest MethodCharpy Notched Impact StrengthNo Break-ThermalNominal ValueUnitTest MethodMething Temperature265 - 275°CASTM D3307	Tensile Modulus <sup>1</sup> (23°C)	400 - 500	MPa	ASTM D3307
Bending life 44.0E+4 - 6.0E+4CyclesASTM D2176Heat of crystallization16.0 - 24.0J/gDSCHeat of Fusion16.0 - 24.0J/gDSCFlange temperature370 - 400°C-Cross nose temperature380 - 410°C-Steel wire preheating120°C-ImpactNominal ValueUnitTest MethodCharpy Notched Impact StrengthNo BreakUnitTest MethodMething Temperature265 - 275°CASTM D3307	Tensile Strength <sup>2</sup> (Break, 23°C)	> 25.0	MPa	ASTM D3307
Heat of crystallization16.0 - 24.0J/gDSCHeat of Fusion16.0 - 24.0J/gDSCFlange temperature370 - 400°C-Cross nose temperature380 - 410°C-Steel wire preheating120°C-ImpactNominal ValueUnitTest MethodCharpy Notched Impact StrengthNo BreakThermalNominal ValueUnitTest MethodMelting Temperature265 - 275°C-	Tensile Elongation <sup>3</sup> (Break, 23°C)	> 300	%	ASTM D3307
Heat of Fusion160 - 24.0J/gDSCFlange temperature370 - 400°C-Cross nose temperature380 - 410°C-Steel wire preheating120°C-ImpactNominal ValueUnitTest MethodCharpy Notched Impact StrengthNo BreakThermalNominal ValueUnitTest MethodMelting Temperature265 - 275°CASTM D3307	Bending life <sup>4</sup>	4.0E+4 - 6.0E+4	Cycles	ASTM D2176
Flange temperature370 - 400°CCross nose temperature380 - 410°CSteel wire preheating120°CImpactNominal ValueUnitTest MethodCharpy Notched Impact StrengthNo BreakUnitTest MethodThermalNominal ValueUnitTest MethodMelting Temperature265 - 275°CASTM D3307	Heat of crystallization	16.0 - 24.0	J/g	DSC
Cross nose temperature380 - 410°CSteel wire preheating120°CImpactNominal ValueUnitTest MethodCharpy Notched Impact StrengthNo BreakVinitTest MethodThermalNominal ValueUnitTest MethodMelting Temperature265 - 275°CASTM D3307	Heat of Fusion	16.0 - 24.0	J/g	DSC
Steel wire preheating120°CImpactNominal ValueUnitTest MethodCharpy Notched Impact StrengthNo BreakThermalNominal ValueUnitTest MethodMelting Temperature265 - 275°CASTM D3307	Flange temperature	370 - 400	°C	
ImpactNominal ValueUnitTest MethodCharpy Notched Impact StrengthNo BreakThermalNominal ValueUnitTest MethodMelting Temperature265 - 275°CASTM D3307	Cross nose temperature	380 - 410	°C	
Charpy Notched Impact Strength No Break   Thermal Nominal Value Unit Test Method   Melting Temperature 265 - 275 °C ASTM D3307	Steel wire preheating	120	°C	
ThermalNominal ValueUnitTest MethodMelting Temperature265 - 275°CASTM D3307	Impact	Nominal Value	Unit	Test Method
Melting Temperature 265 - 275 °C ASTM D3307	Charpy Notched Impact Strength	No Break		
	Thermal	Nominal Value	Unit	Test Method
Peak Crystallization Temperature (DSC) 255 - 265 °C DSC	Melting Temperature	265 - 275	°C	ASTM D3307
	Peak Crystallization Temperature (DSC)	255 - 265	°C	DSC

CLTE - Flow	1.2E-4 - 2.0E-4	cm/cm/°C	ASTM D696
Specific Heat (23°C)	900 - 1100	J/kg/°C	DSC
Thermal Conductivity (40°C)	0.20	W/m/K	ASTM C177
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+17	ohms	ASTM D257
Volume Resistivity	> 1.0E+17	ohms•cm	ASTM D257
Dielectric Strength <sup>5</sup> (1.00 mm)	35 - 40	kV/mm	ASTM D149
Dielectric Constant			ASTM D150
23°C, 50 Hz	2.00		ASTM D150
23°C, 100 kHz	2.00		ASTM D150
Dissipation Factor			ASTM D150
23°C, 50 Hz	< 5.0E-4		ASTM D150
23°C, 100 kHz	< 5.0E-4		ASTM D150
Flammability	Nominal Value	Unit	Test Method
Flame Rating	V-0		UL 94
Oxygen Index	95	%	ASTM D2863

COLOR MASTER BATCHES

We recommend that only Color Master Batches based in MFA® be used. Master Batches based on other fluoropolymers can negatively influence the superior processing and electrical performance of the resin. A list of suppliers can be obtained from your Solvay sales representative. HEALTH SAFETY AND ENVIRONMENT

Hyflon ® MFA® F1540 is a very inert polymer and it is not harmful if used and handled according to standard processing procedures. If handled inappropriately, it may release harmful toxic chemicals.

Hyflon® MFA® F1540 does not contain any RoHS or WEEE substances, it is not produced using APFO and contains no APFO. Please refer to the Material Safety Data Sheets for more information on handling and safety.

#### PACKAGING AND STORAGE

The Hyflon® MFA® F1540 resin is available in 25 kg (55 lbs) and 500 kg (1102 lbs) packaging. Though it has an indefinite shelf life, it is recommended to store it in a clean area, protected by direct sun light and possible contamination.

Extrusion	Nominal Value	Unit	
Cylinder Zone 1 Temp.	240 - 290	°C	
Cylinder Zone 2 Temp.	270 - 320	°C	
Cylinder Zone 3 Temp.	300 - 360	°C	
Cylinder Zone 4 Temp.	330 - 380	°C	
Cylinder Zone 5 Temp.	340 - 390	°C	
Adapter Temperature	370 - 400	°C	
Melt Temperature	390 - 420	°C	
Die Temperature	390 - 420	°C	
Extrusion instructions			

#### WIRE AND CABLE PROCESSING GUIDELINES

As with other fluoropolymers, MFA is corrosive in the melt. Therefore all parts coming into prolonged contact with the melt should be made with corrosion resistant materials such as Hastelloy<sup>®</sup>, Inconel<sup>®</sup>, Monel<sup>®</sup> or Xaloy<sup>®</sup>. Chrome or nickel plating is not recommended since they are typically only sufficient for brief processing tests.

Hyflon MFA F1540 is applied onto wire using tubing extrusion techniques similar to other thermoplastic materials. An overview of the temperature, tooling and equipment requirements are in the following tables.

Many different screw designs can be used. Single-flight screws are recommended while barrier-flights should be avoided. A typical screw design consist of a long feed section, followed by a 2 to 6 flight transition and a 5 to 7 flight metering section. The addition of a block mixing section can improve the processing performance.

EQUIPMENT/TOOLING REQUIREMENTS Line Speed: 200 to 350 m/min (700 to 1200 ft/min) Draw Down Ratio: 80 to 120 Draw Balance: 0.96 to 1.04 Extruder L/D: 20/1 to 30/1 Screen Pack: Breaker plate only is required.

NOTE	
1.	1.0 mm/min
2.	50 mm/min
3.	50 mm/min
4.	0.3mm film
5.	50Hz

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

#### Recommended distributors for this material

# Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

