



## OnFlex™-S EH 70A-3S7004

### Styrenic Thermoplastic Elastomer

#### Key Characteristics

##### Product Description

OnFlex™-S EH thermoplastic elastomer compounds are based on hydrogenated styrenic block copolymers. This range of compounds are formulated to deliver a great cost/performance ratio in addition to typical OnFlex™-S properties such as a wide hardness range, good mechanical properties, good processability, good colourability and a wide temperature operating range. OnFlex™-S EH compounds are filled, and are therefore opaque and have a moderately high density.

##### General

|                       |                                           |                                              |                           |
|-----------------------|-------------------------------------------|----------------------------------------------|---------------------------|
| Material Status       | • Commercial: Active                      |                                              |                           |
| Regional Availability | • Africa & Middle East<br>• Asia Pacific  | • Europe<br>• North America                  | • South America           |
| Features              | • General Purpose                         |                                              |                           |
| Uses                  | • Appliances<br>• Automotive Applications | • Consumer Applications<br>• General Purpose | • Industrial Applications |
| RoHS Compliance       | • RoHS Compliant                          |                                              |                           |
| Forms                 | • Pellets                                 |                                              |                           |
| Processing Method     | • Injection Molding                       |                                              |                           |

#### Technical Properties <sup>1</sup>

| Physical                     | Typical Value (English) | Typical Value (SI)     | Test Method |
|------------------------------|-------------------------|------------------------|-------------|
| Density                      | 1.20 g/cm <sup>3</sup>  | 1.20 g/cm <sup>3</sup> | ISO 1183    |
| Elastomers                   | Typical Value (English) | Typical Value (SI)     | Test Method |
| Tensile Stress (100% Strain) | 348 psi                 | 2.40 MPa               | ISO 37      |
| Tensile Stress (300% Strain) | 464 psi                 | 3.20 MPa               | ISO 37      |
| Tensile Stress (Break)       | 725 psi                 | 5.00 MPa               | ISO 37      |
| Tensile Elongation (Break)   | 550 %                   | 550 %                  | ISO 37      |
| Tear Strength                | 150 lbf/in              | 26 kN/m                | ISO 34-1    |
| Compression Set              |                         |                        | ISO 815     |
| 73°F (23°C), 72.0 hr         | 29 %                    | 29 %                   |             |
| 158°F (70°C), 22.0 hr        | 50 %                    | 50 %                   |             |
| 212°F (100°C), 22.0 hr       | 78 %                    | 78 %                   |             |
| Hardness                     | Typical Value (English) | Typical Value (SI)     | Test Method |
| Shore Hardness (Shore A)     | 70                      | 70                     | ISO 868     |

##### Additional Properties

Properties are measured using injection molded plaques.

#### Processing Information

| Injection              | Typical Value (English) | Typical Value (SI) |
|------------------------|-------------------------|--------------------|
| Processing (Melt) Temp | 356 to 428 °F           | 180 to 220 °C      |
| Mold Temperature       | 86.0 to 140 °F          | 30.0 to 60.0 °C    |
| Injection Rate         | Fast                    | Fast               |

#### Notes

<sup>1</sup> Typical values are not to be construed as specifications.

## CONTACT INFORMATION

**Americas**

Argentina - Buenos Aires  
+0054 11 4200 5917

Brasil - Campinas  
+55 19 3206 0561

Mexico - Toluca  
+52 722 2790200

United States - Avon Lake  
+1 440 930 1000

United States - McHenry  
+1 (815) 385-8500

**Asia**

China - Shenzhen  
+86 (0) 755 2969 2888

China - Suzhou  
+86 (0) 512 6823 24 38

China - Suzhou  
+86 512 6265 2600

Hong Kong -  
+852 2690 5332

India - Mumbai  
+91 9820 194 220

Taiwan - Yonghe City,  
+886 9396 99740

**Europe**

Germany - Gaggenau  
+49 (0) 7225 6802 0

Netherlands - The Netherlands  
+31 (0) 165 331 293

Spain - Barbastro (Huesca)  
+34 (0) 9 7431 0314

Turkey - Cekmece-Istanbul-Türkiye  
+90 (0) 212 549 2256



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[www.polyone.com](http://www.polyone.com)

**PolyOne Americas**

33587 Walker Road  
Avon Lake, Ohio 44012  
United States  
+1 440 930 1000  
+1 866 POLYONE

**PolyOne Asia**

No. 88 Guoshoujing Road  
Z.J Hi-tech Park, Pudong  
Shanghai, 201203, China  
+86 (0) 21 5080 1188

**PolyOne Europe**

2 Rue Melville Wilson  
5330 Assesse, Belgium  
+32 (0) 83 660 211