

## BASF Elastollan 1154 D FHF TPUR Flame Retardant Halogen Free

Category : Polymer , Thermoplastic , Polyurethane, TP , Thermoplastic Polyurethane (TPUR), Polyether Grade

### Material Notes:

Description: Thermoplastic Polyether Polyurethane Elastomers with outstanding hydrolysis resistance, low temperature flexibility and resistance to micro-organisms. Typical Applications: Cable sheathing, plugs and terminations, spiral tubing, films, ski boot shells, ear tags, technical moldings, e.g. mining screens, railway pads and seals. Note: Quoted results are from measurements on injection molded test platens, post tempered for 20 hours at 100°C. Information provided by BASF

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_BASF-Elastollan-1154-D-FHF-TPUR-Flame-Retardant-Halogen-Free.php](http://www.lookpolymers.com/polymer_BASF-Elastollan-1154-D-FHF-TPUR-Flame-Retardant-Halogen-Free.php)

| Physical Properties | Metric    | English                   | Comments     |
|---------------------|-----------|---------------------------|--------------|
| Density             | 1.27 g/cc | 0.0459 lb/in <sup>3</sup> | ISO 1183-1-A |

| Mechanical Properties  | Metric                  | English                    | Comments                                           |
|------------------------|-------------------------|----------------------------|----------------------------------------------------|
| Hardness, Shore D      | 58                      | 58                         | ISO 686                                            |
| Tensile Strength       | 20.0 MPa                | 2900 psi                   | after storage in water at 80°C for 42 days; ISO 37 |
|                        | 30.0 MPa                | 4350 psi                   | ISO 37                                             |
|                        | 13.0 MPa                | 1890 psi                   | ISO 37                                             |
|                        | @Strain 20.0 %          | @Strain 20.0 %             |                                                    |
|                        | 19.0 MPa                | 2760 psi                   | ISO 37                                             |
|                        | @Strain 100 %           | @Strain 100 %              |                                                    |
|                        | 33.0 MPa                | 4790 psi                   | ISO 37                                             |
|                        | @Strain 300 %           | @Strain 300 %              |                                                    |
| Elongation at Break    | 400 %                   | 400 %                      | ISO 37                                             |
|                        | 400 %                   | 400 %                      | after storage in water at 80°C for 42 days; ISO 37 |
| Charpy Impact, Notched | 0.300 J/cm <sup>2</sup> | 1.43 ft-lb/in <sup>2</sup> | DIN EN ISO 179                                     |
|                        | @Temperature -30.0 °C   | @Temperature -22.0 °F      |                                                    |
|                        | 5.00 J/cm <sup>2</sup>  | 23.8 ft-lb/in <sup>2</sup> | DIN EN ISO 179                                     |
|                        | @Temperature 23.0 °C    | @Temperature 73.4 °F       |                                                    |
| Tear Strength          | 110 kN/m                | 628 pli                    | DIN ISO 34-1/Bb                                    |
| Abrasion               | 30                      | 30                         | [mm<sup>3</sup>; ISO 4649                          |
|                        | 30 %                    | 30 %                       |                                                    |

| Compression Set<br>Mechanical Properties | Metric<br>@ Temperature 23.0 °C | English<br>@ Temperature 73.4 °F | ISO 815<br>Comments |
|------------------------------------------|---------------------------------|----------------------------------|---------------------|
|                                          | 45 %                            | 45 %                             | ISO 815             |
|                                          | @Temperature 70.0 °C            | @Temperature 158 °F              |                     |

| Thermal Properties | Metric | English | Comments                  |
|--------------------|--------|---------|---------------------------|
| Flammability, UL94 | V-2    | V-2     | according to wall section |
|                    | V-0    | V-0     |                           |

| Processing Properties  | Metric         | English       | Comments          |
|------------------------|----------------|---------------|-------------------|
| Processing Temperature | 160 - 220 °C   | 320 - 428 °F  | Extrusion         |
|                        | 170 - 240 °C   | 338 - 464 °F  | Injection molding |
| Mold Temperature       | 20.0 - 70.0 °C | 68.0 - 158 °F |                   |

| Descriptive Properties       | Value                           | Comments |
|------------------------------|---------------------------------|----------|
| Commercial Status            | North America                   |          |
| Primary Processing Technique | Injection molding and Extrusion |          |

## Contact Songhan Plastic Technology Co.,Ltd.

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