# Estane® ZHF 85AT8 MATT 01

Wednesday, November 6, 2019

**Lubrizol Advanced Materials, Inc. - Thermoplastic Polyurethane Elastomer (Polyether)**

## General Information

**Product Description**

Type: ESTANE® ZHF85AT8 MATT 01 is a non halogen, flame retardant aromatic polyether-based thermoplastic polyurethane.

Application: Extrusion

| General | | | |
|---|---|---|---|
| Material Status | • Commercial: Active | | |
| Availability | • Africa & Middle East<br>• Asia Pacific | • Europe<br>• Latin America | • North America |
| Features | • Aromatic | • Flame Retardant | • Halogen Free |
| Appearance | • Matte Finish | | |
| Forms | • Pellets | | |
| Processing Method | • Extrusion | | |

## ASTM & ISO Properties [1]

| Physical | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Density | 1.14 | g/cm³ | ISO 2781 |
| **Mechanical** | **Nominal Value** | **Unit** | **Test Method** |
| Tensile Stress | | | ISO 527-2/5A/200 |
| -- | 7250 | psi | |
| 50% Strain | 725 | psi | |
| 100% Strain | 870 | psi | |
| 300% Strain | 1450 | psi | |
| Tensile Strain (Break) | 550 | % | ISO 527-2/5A/200 |
| Abrasion Resistance | 40.0 | mm³ | ISO 4649-A |
| **Elastomers** | **Nominal Value** | **Unit** | **Test Method** |
| Tear Strength [2] | 314 | lbf/in | ISO 34-1 |
| **Hardness** | **Nominal Value** | **Unit** | **Test Method** |
| Shore Hardness (Shore A, 1 sec) | 84 | | ISO 868 |
| **Thermal** | **Nominal Value** | **Unit** | **Test Method** |
| Vicat Softening Temperature | 172 | °F | ISO 306 |
| **Flammability** | **Nominal Value** | **Unit** | **Test Method** |
| Flame Rating | V-2 | | UL 94 |
| Oxygen Index | 24 | % | ASTM D2863 |

## Processing Information

| Extrusion | Nominal Value | Unit |
|---|---|---|
| Drying Temperature | 176 | °F |
| Drying Time | 3.0 to 4.0 | hr |
| Cylinder Zone 1 Temp. | 392 | °F |
| Cylinder Zone 2 Temp. | 383 | °F |
| Cylinder Zone 3 Temp. | 374 | °F |
| Cylinder Zone 4 Temp. | 365 | °F |
| Adapter Temperature | 356 | °F |

# Estane® ZHF 85AT8 MATT 01

## Lubrizol Advanced Materials, Inc. - Thermoplastic Polyurethane Elastomer (Polyether)

| Extrusion | Nominal Value | Unit |
|---|---|---|
| Die Temperature | 347 | °F |

### Notes

[1] Typical properties: these are not to be construed as specifications.

[2] Method Bb, Angle (Nicked)