# HOSTAFORM® C 9021 XAP® C

## HOSTAFORM®

POM copolymer Medium flow injection molding grade with very low emissions and migrations; designed for consumer packaging. Emission according to VDA 275 < 2 mg/kg (natural grades), VDA 275 < 5 mg/kg (colors), Monomers and additives are listed in EU-Regulation (EU) 10/2011 FDA compliant according to 21 CFR 177.2470 FDA = Food and Drug Administration (USA)

## Product information

| | | |
|---|---|---|
| Resin Identification | POM | ISO 1043 |
| Part Marking Code | >POM< | ISO 11469 |

## Rheological properties

| | | | |
|---|---|---|---|
| Melt volume-flow rate | 8 | $cm^3$/10min | ISO 1133 |
| Temperature | 374 | °F | |
| Load | 4.76 | lb | |
| Molding shrinkage, parallel | 2.0 | % | ISO 294-4, 2577 |
| Molding shrinkage, normal | 1.8 | % | ISO 294-4, 2577 |

## Typical mechanical properties

| | | | |
|---|---|---|---|
| Tensile modulus | 413000 | psi | ISO 527-1/-2 |
| Tensile stress at yield, 50mm/min | 9300 | psi | ISO 527-1/-2 |
| Tensile strain at yield, 50mm/min | 9 | % | ISO 527-1/-2 |
| Nominal strain at break | 30 | % | ISO 527-1/-2 |
| Flexural modulus | 392000 | psi | ISO 178 |
| Flexural strength | 12900 | psi | ISO 178 |
| Tensile creep modulus, 1h | 363000 | psi | ISO 899-1 |
| Tensile creep modulus, 1000h | 189000 | psi | ISO 899-1 |
| Charpy impact strength, 23°C | 105[P] | ftlb/$in^2$ | ISO 179/1eU |
| Charpy impact strength, -30°C | 105 | ftlb/$in^2$ | ISO 179/1eU |
| Charpy notched impact strength, 23°C | 3.09 | ftlb/$in^2$ | ISO 179/1eA |
| Charpy notched impact strength, -30°C | 2.85 | ftlb/$in^2$ | ISO 179/1eA |
| Ball indentation hardness, H 358/30 | 20900 | psi | ISO 2039-1 |

[P]: Partial Break

## Thermal properties

| | | | |
|---|---|---|---|
| Melting temperature, 10°C/min | 331 | °F | ISO 11357-1/-3 |
| Temperature of deflection under load, 1.8 MPa | 219 | °F | ISO 75-1/-2 |
| Coefficient of linear thermal expansion (CLTE), parallel | 0.61 | E-4/°F | ISO 11359-1/-2 |
| Coefficient of linear thermal expansion (CLTE), normal | 0.611 | E-4/°F | ISO 11359-1/-2 |
| Thermal conductivity of melt | 0.155 | W/(m K) | ISO 22007-2 |
| Effective thermal diffusivity, flow | 4.85E-8 | $m^2/s$ | ISO 22007-4 |
| Specific heat capacity of melt | 2210 | J/(kg K) | ISO 22007-4 |

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## Electrical properties

| | | | |
|---|---|---|---|
| Relative permittivity, 100Hz | 4 | | IEC 62631-2-1 |
| Relative permittivity, 1MHz | 4 | | IEC 62631-2-1 |
| Dissipation factor, 100Hz | 20 | E-4 | IEC 62631-2-1 |
| Dissipation factor, 1MHz | 50 | E-4 | IEC 62631-2-1 |
| Volume resistivity | 1E12 | Ohm.m | IEC 62631-3-1 |
| Surface resistivity | 1E14 | Ohm | IEC 62631-3-2 |
| Electric strength | 889 | kV/in | IEC 60243-1 |
| Comparative tracking index | 600 | | IEC 60112 |

## Physical/Other properties

| | | | |
|---|---|---|---|
| Humidity absorption, 2mm | 0.2 | % | Sim. to ISO 62 |
| Water absorption, 2mm | 0.65 | % | Sim. to ISO 62 |
| Density | 0.0509 | lb/in$^3$ | ISO 1183 |

## Injection

| | | |
|---|---|---|
| Drying Recommended | no | |
| Drying Temperature | 212 | °F |
| Drying Time, Dehumidified Dryer | 3 - 4 | h |
| Processing Moisture Content | ≤0.2 | % |
| Melt Temperature Optimum | 392 | °F |
| Min. melt temperature | 374 | °F |
| Max. melt temperature | 410 | °F |
| Max. screw tangential speed | ≤0.3 | m/s |
| Mold Temperature Optimum | 212 | °F |
| Min. mold temperature | 176 | °F |
| Max. mold temperature | 248 | °F |
| Hold pressure range | 8700 - 17400 | psi |
| Hold Pressure Time<br>(h is the max. wall thickness of the part in mm) | 2h$^2$-3 | s |
| Back pressure | 580 | psi |
| Ejection temperature | 284 | °F |

## Characteristics

| | |
|---|---|
| Processing | Injection Molding |
| Additives | Release agent |
| Special characteristics | Low emissions |

## Additional information

Processing Notes

### Pre-Drying

It is normally not necessary to dry HOSTAFORM. However, should there be surface moisture (condensate) on the molding compound as a result of incorrect storage, drying is required. A circulating air drying cabinet can be used for this purpose if the granul

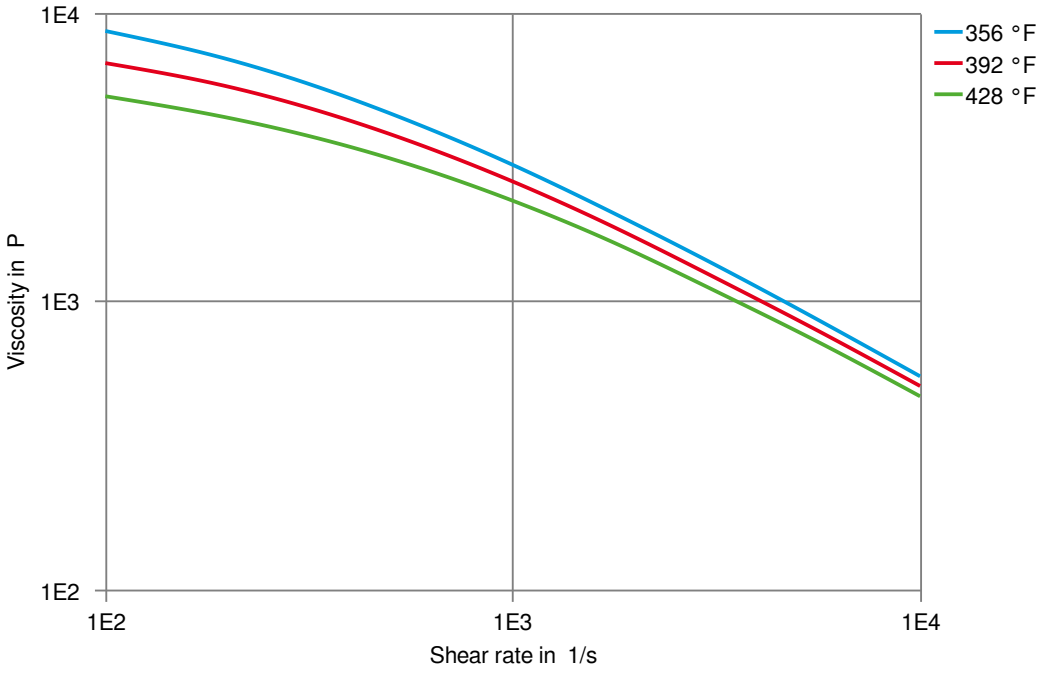
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## Storage

The product can then be stored in standard conditions until processed.

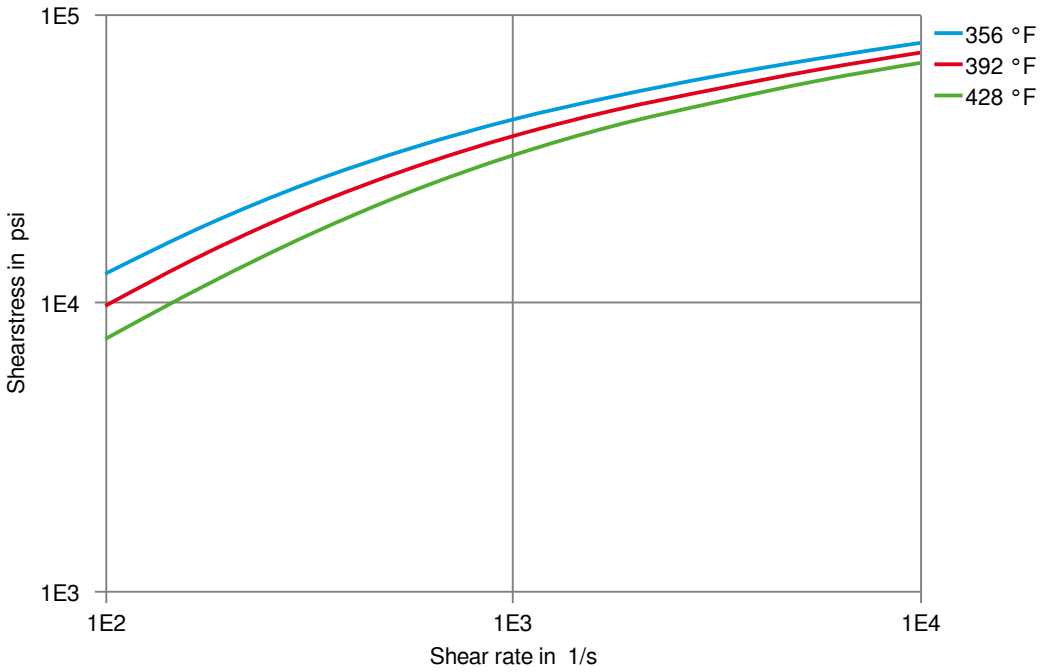
## Viscosity-shear rate



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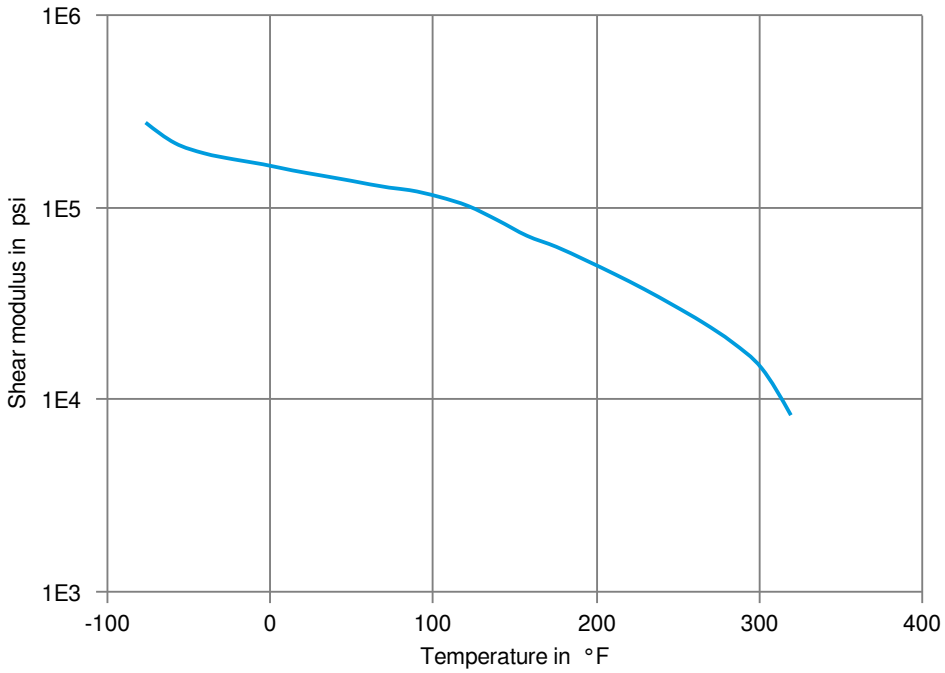
### Shearstress-shear rate



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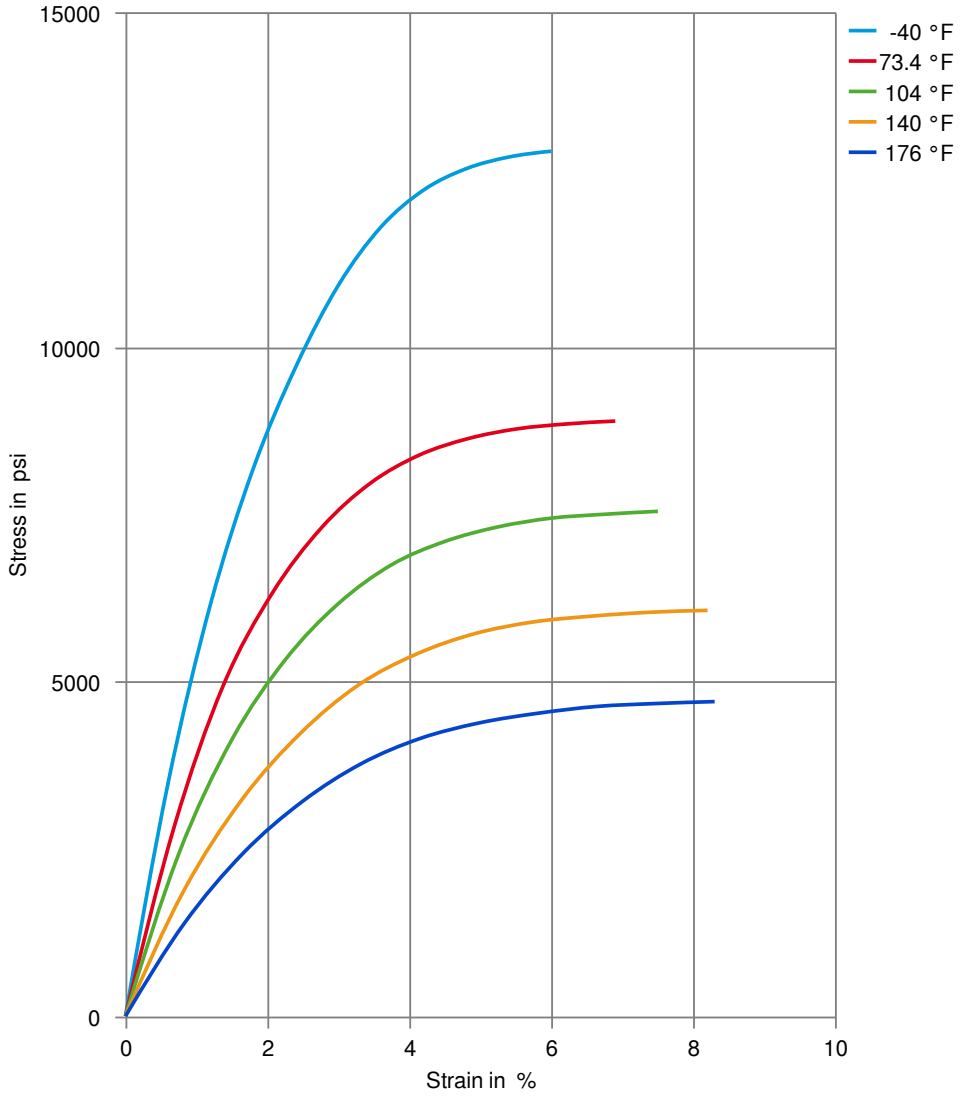
### Dynamic Shear modulus-temperature



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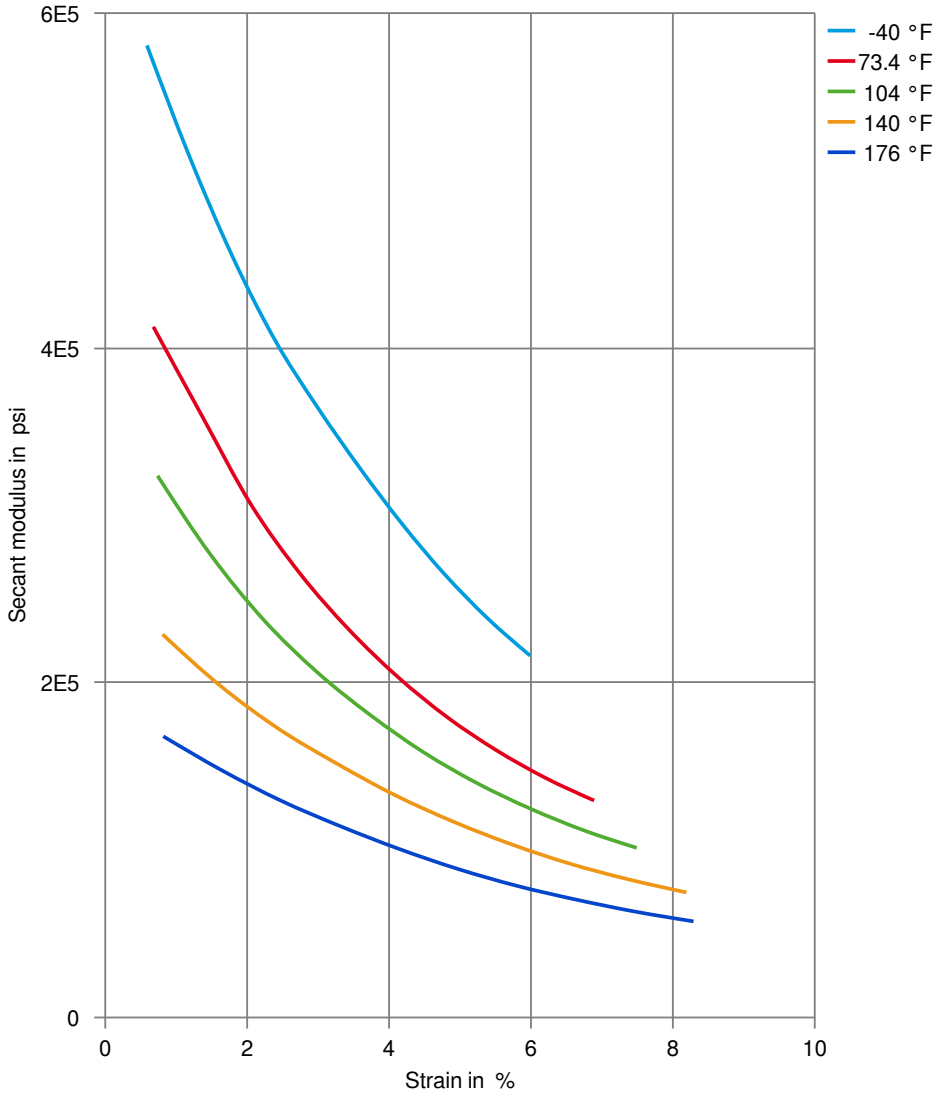
### Stress-strain



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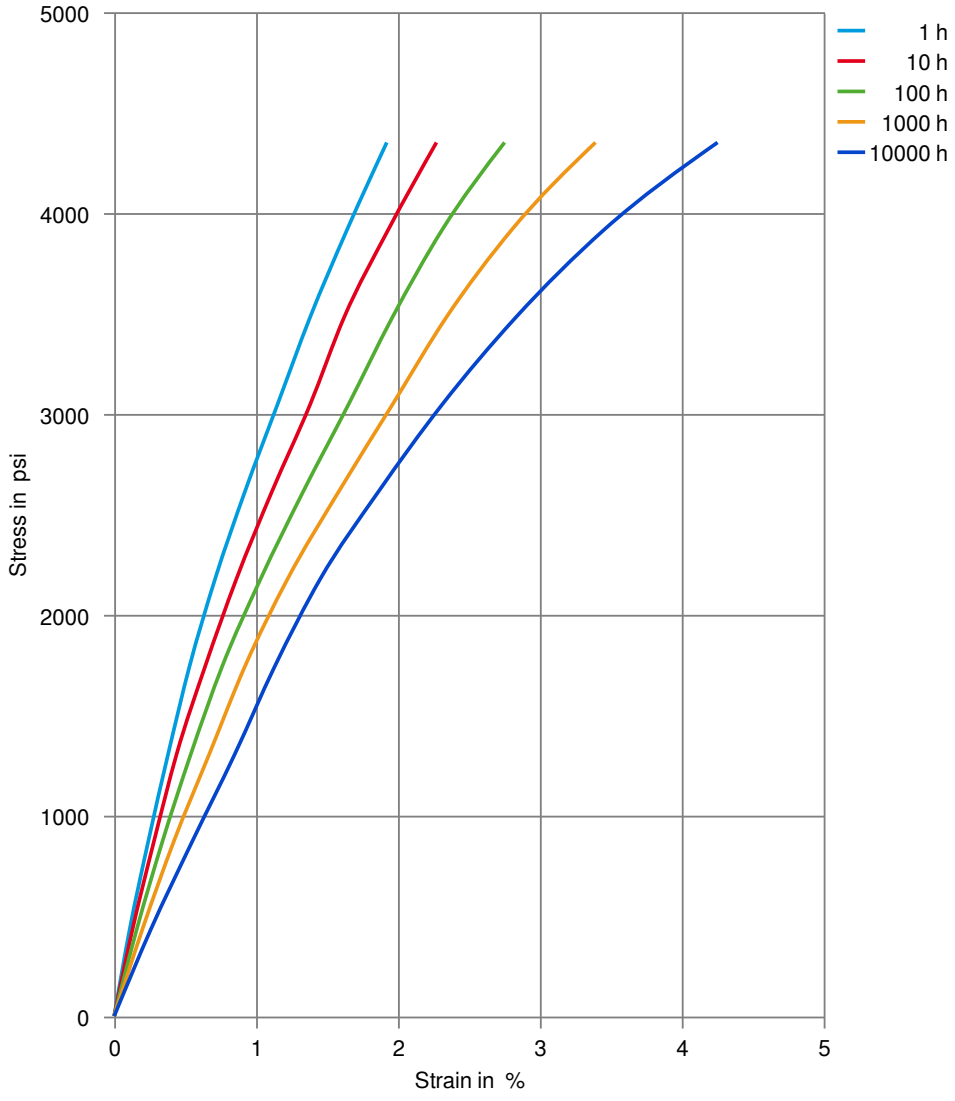
### Secant modulus-strain



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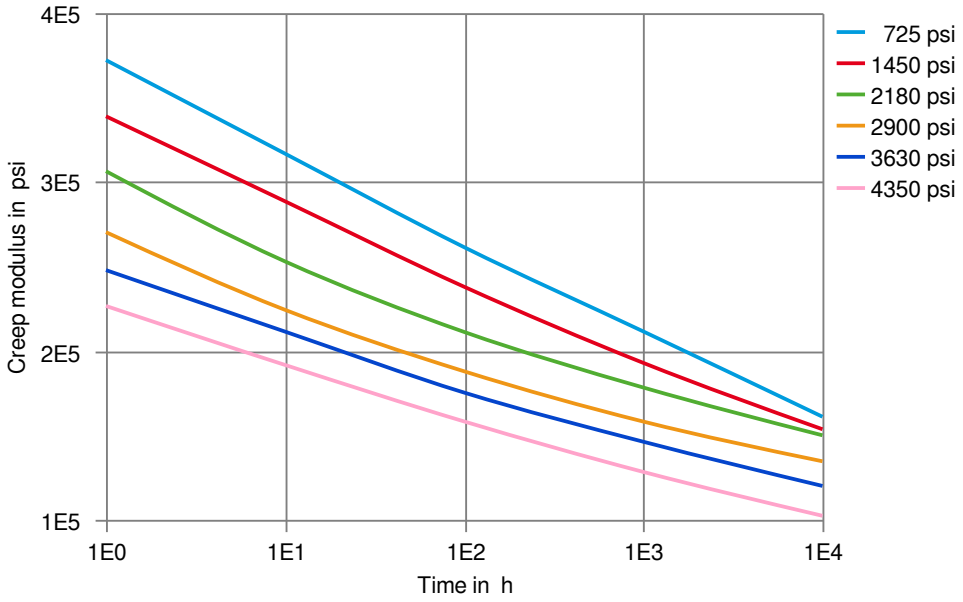
### Stress-strain (isochronous) 73.4 °F



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### Creep modulus-time 73.4 °F






Revised: 2025-07-10 Source: Celanese Materials Database

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