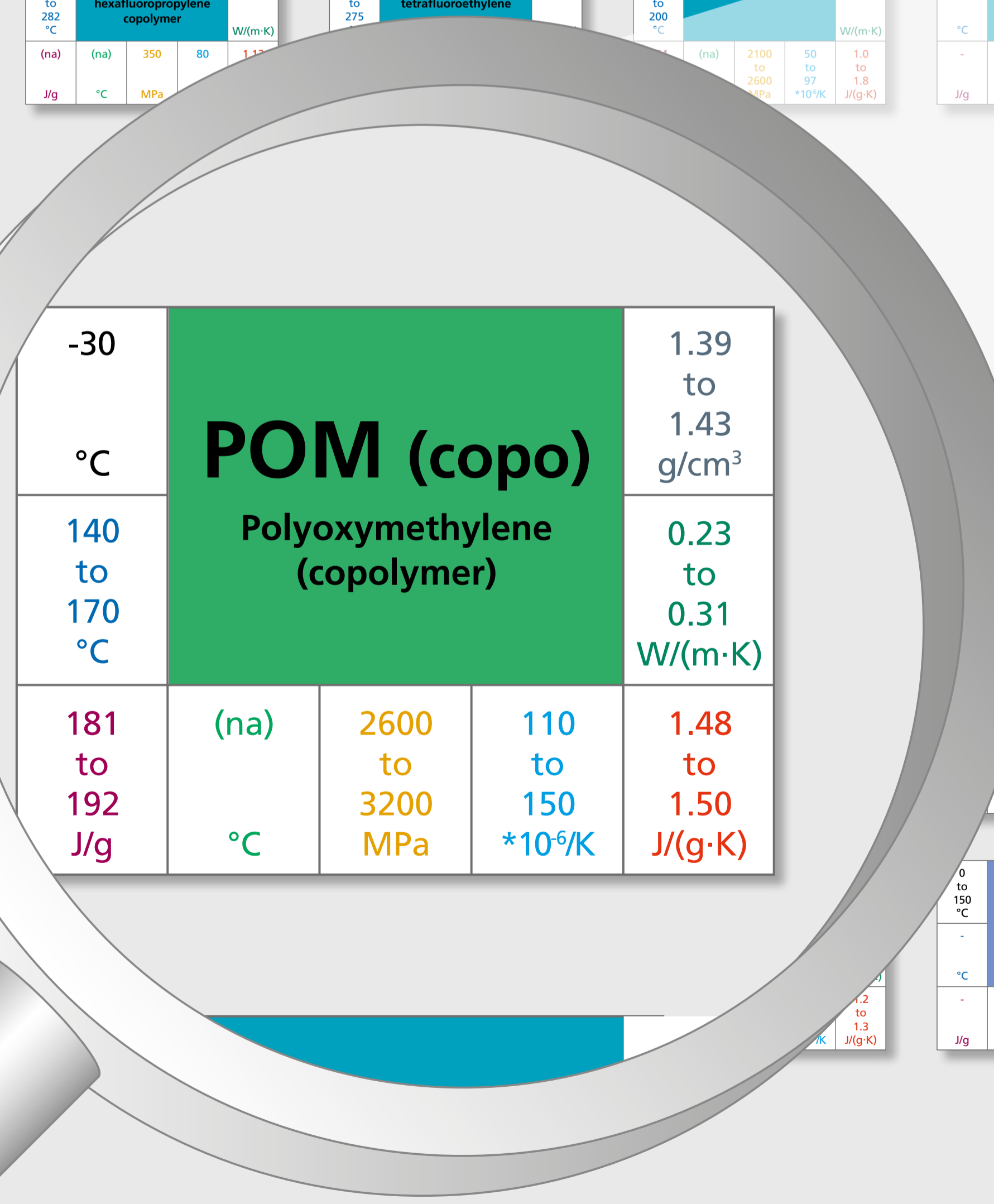


Thermal Properties of Polymers

| | | | | | | | | | | |
|---|--|---|---|--|--|--|---|--|--|--|
| ABS Acrylonitrile-butadiene-styrene copolymer | SAN Styrene-acrylonitrile copolymer | ASA Acrylonitrile-styrene-acrylate copolymer | SB Styrene/Polybutadiene copolymer | PS Polystyrene | PE-LD Polyethylene low density | PE-LLD Polyethylene linear low density | PE-HD Polyethylene high density | PE-UHMW Polyethylene ultra high molecular weight | EVA Polyethylene-co-vinyl acetate | PP (isotactic) Polypropylene |
| PB Polybutene | PIB Polyisobutylene | PVC-P Polyvinylchloride (with plasticizer) | PVC-U Polyvinylchloride (without plasticizer) | PVDC Polyvinylidenechloride | PVAL Polyvinylalcohol | PLA Polylactide | PA11 Polyamide 11 | PA12 Polyamide 12 | PA46 Polyamide 46 | PA6 Polyamide 6 |
| PA610 Polyamide 610 | PA612 Polyamide 612 | PA66 Polyamide 66 | PBT Polybutylene terephthalate | PET Polyethylene terephthalate | PC Polycarbonate | PMMA Polymethylmethacrylate | POM (homo) Polyoxymethylene (homopolymer) | POM (copo) Polyoxymethylene (copolymer) | PPS Polyphenylenesulfide | PSU Polysulfone |
| PTFE Polytetrafluoroethylene | PVDF Polyvinylidene fluoride | FEP Tetrafluoroethylene/hexafluoropropylene copolymer | ETFE Ethylene-tetrafluoroethylene | PVF Polyvinyl fluoride | PA6-3-T Polyamide 6-3-T | PA6/6T Polyamide 6/6T | PEI Polyetherimide | PEEK Polyetheretherketone | PEKEKK Polyaryletherketone-etherketoneketone | |
| PFA Perfluoroalkoxy | (HBA/HNA)-LCP Hydroxybenzoic acid-2,6-hydroxynaphtheneic acid (liquid crystalline polymer) | TPO, TPV Polyolefine based TPE | TPU Urethane based | NBR Nitrile-butadiene rubber | NR Natural rubber | Q Silicone rubber | SBR Styrene-butadiene rubber | | | |
| BR Butadiene rubber | CM Chlorinated polybutadiene rubber | | | UP Unsaturated polyester resin | | | | | | |
| EP Epoxy resin | MF Melamine-formaldehyde resin | | | | | | | | | |



| | |
|----------------------|---------------------------------|
| -30 to 170 °C | 1.39 to 1.43 g/cm ³ |
| 140 to 170 °C | 0.23 to 0.31 W/(m·K) |
| 181 to 192 J/g | (na) °C |
| 2600 to 3200 MPa | 110 to 150 *10 ⁻⁶ /K |
| 1.48 to 1.50 J/(g·K) | |

| | | | | | |
|------------------------------|---------------------------|-----------------|---|------------------------|----------------------|
| Glass Transition Temperature | Abreviation | | | | Density |
| Melting Temperature | Name | | | | Thermal Conductivity |
| Melting Enthalpy | Decomposition Temperature | Young's Modulus | Coefficient of Linear Thermal Expansion | Specific Heat Capacity | |

- (1) at room temperature
- (2) DTG peak temperature, determined at 10 K/min under nitrogen
- (3) dry conditions
- (4) thermal method
- (na) not available

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|--|
| Commodity Thermoplastics |
| Engineering Thermoplastics |
| High-Temperature Resistant Thermoplastics |
| Thermoplastic Elastomers |
| Elastomers |
| Thermosets |

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