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Technical Data Sheet

- Product Name** QPAC® 40
- Technical Name** Poly (propylene carbonate)
- Chemical Formula** (C₄H₆O₃)_n
- Product Description** Poly (propylene carbonate) is a solid polymer. It is an amorphous, clear, readily processible plastic with long term mechanical stability. I
- Molecular Weight Avail** From Approximately 100,000 to 300,000
- Applications:**
- Binder applications for ceramics, metal or glass powders.
 - Used to make high purity technical parts
 - Pastes and inks
 - Coatings
 - Sacrificial structural applications
 - Decomposable channel former
 - Pore former
 - Non binder applications for barrier film in plastic processing

Typical Physical Properties

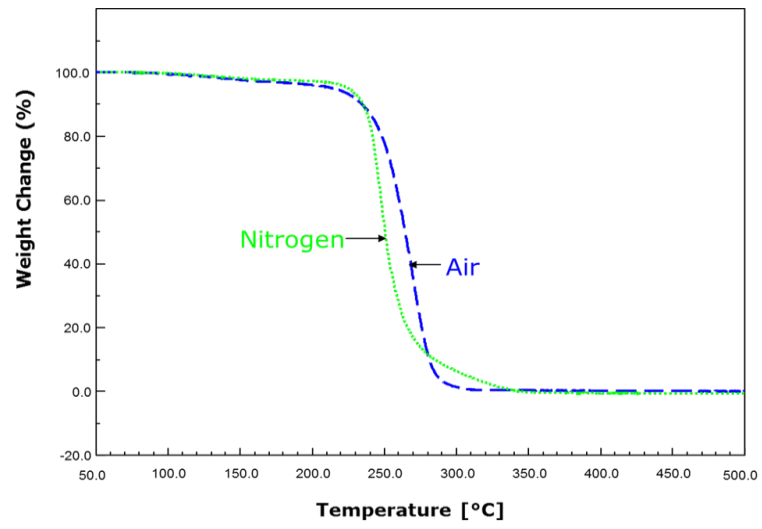
Property	Value
Density (g/cm ³)	1.26
Refractive Index	1.463
Decomposition Temperature (°C)	250 (estimate)
Glass Transition Temperature (°C)	15-40
Heat of combustion (cal/gm)	4,266
Heat of formation (cal/mol)	-146,000
Molar Mass of repeating unit	102.1
Solubility	Upon request

Product Delivery Form It is available as a pellet, film, in solution form or as an aqueous emulsion.

Benefits Include:

- Upon decomposition, QPAC®40 leaves less than 10 ppm ash residue, resulting in excellent mechanical and/or electrical properties
- Low temperature decomposition is excellent for thermal sensitive materials and is more efficient than other binders
- QPAC®40 has excellent green strength and results in high density final parts with improved part structure.
- Decomposition can occur in a wide range of atmospheres including air, oxygen, nitrogen, hydrogen, argon and vacuum

TGA FOR QPAC® 40



CAS #

25511-85-7