

Arothane™ ARP-W-G

► Description

Arothane™ ARP-W-G is medical grade aromatic polyether-based thermoplastic polyurethane (TPU) loaded with **40-60% Tungsten** as radiopacifier. It exhibits exceptional radiopacity compared to Barium Sulfate especially for small-dimension or thin-walled devices. ARP-W-G is known for its small particle size, high fluidity, and good dispersion. It is typically a material choice for guidewire coating.

► Biocompatibility

Arothane™ ARP-W-G pellets passed the Hemolysis test (ISO 10993-4), MEM Elution test (ISO 10993-5), Intracutaneous Irritation test (ISO 10993-10:2010 & 10993-23:2021), Dermal Sensitization test (ISO 10993-10:2010, 2021), Acute Systemic Toxicity test (ISO 10993-11) and *in vivo* Pyrogen test (ISO 10993-11, USP <151>.)

► Storage

Arothane™ ARP-W-G TPU pellets should be stored in a cool and dry environment in their original containers until used. Storage temperature should not exceed 85°F/30°C. If only a portion of TPU pellets was used, the container with remaining TPU pellets should be tightly closed.

► Products and Properties

Arothane™ ARP-W-G	ASTM Test	ARP-85A-W40-G	ARP-85A-W50-G	ARP-85A-W60-G
Durometer (Shore hardness)	D2240	85A	85A	85A
Specific Gravity	D792	1.71	1.98	2.4

Note : These test results are based on small samples of Arothane™ ARP-W-G and do not represent the results from larger test samples. The manufacturing parameters should be adjusted according to users' actual conditions.

► Processing Information

Arothane™ ARP-W-G TPU pellets are hygroscopic and therefore should be dried before processing. Depending on the climate, the pellets absorb moisture rapidly when exposed to the atmosphere. The moisture might cause severe degradation of polymers during processing and form bubbles or streaks in the molded and extruded parts. To ensure efficient and successful processing, the moisture content in TPU pellets is recommended to be less than 0.05%. A dehumidifying dryer is recommended for drying Arothane™ ARP-W TPU. The recommended drying temperature is **205-220/95-105 (°F/°C) for a minimum of 5 hours at -40°F/-40°C dew point.**



► Recommended Extrusion Temperature Profile :

Arothane™ ARP-W-G	ARP-85A-W40-G (°F / °C)	ARP-85A-W50-G (°F / °C)	ARP-85A-W60-G (°F / °C)
Zone 1	340/170	340/170	340/170
Zone 2	350/175	350/175	350/175
Zone 3	350/175	350/175	350/175
Zone 4	355/180	355/180	355/180
Adapter 5	355/180	355/180	355/180
Die	350-365/175-185	350-365/175-185	350-365/175-185

Screen Pack Recommendation : 50/200/100

