



PEXIDAN® Injection Molding Quick Reference

Equipment Recommendations

Screw Type:	Low Intensity Metering Screw
Feeder:	Gravimetric suggested
Dryer:	Regenerative-desiccant-type capable of -40°F/°C Dew Point

Processing Parameters (a good starting point)

Drying:	See 'Handling and Storage' below		
Extruder Profile:	Feed:	310°F/154°C	
	Transition:	330°F/166°C	
	Metering:	350°F/177°C	
	Nozzle:	360°F/185°C	
	Tool Temp:	100-120°F/38-49°C	
Target Melt Temperature:	360-370°F/182-187°C		
Back Pressure:	<50psi		
Screw Speed:	Lowest RPM possible to achieve cycle time (ie. recover before the next shot)		

Handling and Storage

PEXIDAN® A-3001 Graft Compound:

- Has 6 month shelf life under normal conditions.
- Must be stored dry and unopened until ready to use.
- Should be used within a few days once opened.
- Suggest packaging be evacuated of air and completely re-sealed if product cannot be used immediately – may be restored up to 30-days if properly resealed.
- Must not be dried or heated before using.
- Must not be pre-blended with Catalyst Masterbatch unless pre-blend is to be used within 4 hours.

PEXIDAN® Catalyst Masterbatch (CAT and CAT-FR):

- Has no shelf life, but stock should be rotated using FIFO principal.
- Should be dried 4 to 6 hours @ 150°F / 66°C maximum before use.

Color/additive Masterbatches:

- Should be dried 4 to 6 hours @ 150°F / 66°C maximum before use.

Processing

PEXIDAN® compounds are sensitive to heat, moisture and soak time, and all must be controlled during the molding process to insure good processability and high part quality, thus:

- Size the tool and IMM to minimize the number of shots in the barrel (and hot runners)
- Balance cycle time, injection speed and screw RPM to achieve good part surface with minimal dwell/soak time.
- Resist the temptation to increase temperatures to correct process – this will generally create hotspots that will degrade the material over longer run periods.
- Avoid idle time – purge frequently to prevent material from sitting in the barrel, purge barrel with PE when lengthy downtimes are expected.
- Purge barrel several times, or until smooth and lump-free before start-up following extended downtime.

Shutdown

- Purge the barrel and hot runners with polyethylene to remove PEXIDAN® and/or catalyst completely – failure to do so may allow crosslinking and require a **complete** clean out.
- Clean feeders, screw, barrel, nozzle, runners and tool to eliminate all traces of material.

Curing

- Please refer to the ***Curing PEXIDAN XLPE Systems*** document (note - consider insulation thickness and part thickness to be synonymous).

The technical information contained herein is, to the best of our knowledge, believed to be accurate. However, SACO AEI Polymers makes no guarantee or warranty, and does not assume any liability, with respect to the accuracy or completeness of such information. Suitability of material for a specific final end use is the sole responsibility of the user. The data contained herein are typical properties only and are not to be used as specifications.

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