

an EnPro Industries company

# **EP79™ Bearing Material**





- Injection moulded polyamidimid based and modified bearing material
- Irreversible cross-linked by thermal treatment
- High temperature material with low thermal expansion for demanding components
- High viscosity and mechanical strength
- Good chemical resistance
- High wear resistance in oscillating movements
- Colour: black

# **Applications**

## General

Generally applicable within the limits of the material

## Automotive

Automatic gears

## Industrial

Domestic appliances, control valves, fittings, textile machines and many more

Composition & Structure	Operating Conditions		Availability
Injection moulded thermoplastic dry bearing material PAI + Carbon fibres + PTFE	dry oiled greased water process fluid	not recommended very good very good good good after resistance testing	Ex Stock

Microsection	Bearing Properties	Unit	Value
Injection  Injection moulded thermoplastic dry bearing material with additives homogeneously mixed in	Dry  Maximum sliding speed v  Maximum pv factor  The pv Limit is depending on the heat dissipating surface to contact area ratio  1) $A_H/A_C = 5$ 2) $A_H/A_C = 10$ 3) $A_H/A_C = 20$ Coefficient of friction f  Grease lubrication	m/s MPa x m/s	- 1) - 2) - 3) -
	Maximum sliding speed v  Maximum pv factor  Coefficient of friction f  General	m/s MPa x m/s	10 10 0.005 - 0.1
	Maximum temperature T <sub>max</sub> Minimum temperature T <sub>min</sub> Maximum load p static  Shaft surface finish R <sub>a</sub> Shaft hardness	°C °C MPa μm HV	+260 -200 130 0.5±0.3 >500