

Technical Data:

Issued: Nov.2006
Revision 4: February 2023, Page: 1

EP 174/EPC 174

Epoxy Compound with Adjustable Flexibility

Product Description

EP 174/EPC 174 is a two-component epoxy compound, permitting the user to select desired flexibility/hardness. The compound is suitable for potting, sealing and cementing of plastics, metals, ceramics and rubber. EP 174 displays good low temperature stability and cracking resistance down to -40°C. The compound can be applied in various mixing ratio, depending on customer requests.

Features & Benefits

- Adjustable Flexibility
- Good mechanical properties
- High adhesion
- Cracking resistance at low T
- Moderate pot life
- RT cured

Applications

Potting, casting and encapsulating of electric and electronic devices and components

Typical Uncured Properties

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

	EP 174 (A)	EPC 174 (B)
Color	black or beige	amber
Viscosity @25°C, mPa*s,	22000-30000	10000-14000
Specific weight @25°C, g/cm ³	1.6	1.0

Instructions for use:

Premix the EP 174 prior to use in the original container.
Weigh required amount of resin and hardener into a clean container in the recommended ratio. Blend thoroughly being careful to scrape sides and bottom of the container for 3-4 minutes to ensure uniform mixture.
To produce a void-free casting the mixture should be deairing at 2-5 mmHg for 5-8 minutes to remove trapped air.
Pour the mixture into mold.

Technical Data:

Issued: Nov.2006

Revision 4: February 2023, Page: 2

EP 174/EPC 174

Epoxy Compound with Adjustable Flexibility

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Processing		Mixing Ratio A:B (w/w)	
		100:50	100:100
	Mix Viscosity @ 25°C, mPa*s	13000-18000	12000-17000
	Gel Time @ 25°C, (100g), min	90-120	60-100

Cured Properties	Typical Curing Schedule	24hr/RT	24hr/RT
	Hardness, Shore A/D	D70-80	A70-80
	Tensile Strength, kg/cm ²	250-270	30-38
	Elongation, %	7-9	30-40
	Lap Shear Strength, Al/Al, kg/cm ²	120-180	n.d.
	Operating temperature, °C	-40 ÷ +90	

Storage and Handling

The shelf life of the EP 174 is 12 months at 20-35°C.
 For the best results, store in tightly closed original containers.
 Certain resins and hardeners are susceptible to crystallization. If crystallization occurs, warm the container to 50-60°C until the crystals have dissolved.
 Stir and allow content to cool to room temperature before use.

Packaging

Packaging sizes are available from 1L up to 18L pails

Limitation of Liability

Except where prohibited by law, Polymer-G and seller will not be liable for any loss or damage arising from the Polymer-G product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.