BONDPRO 205

EPOXY ADHESIVE

PRODUCT DESCRIPTION

BONDPRO 205 is a fast cure toughened epoxy adhesive offering outstanding performance in numerous bonding applications. It is ideally suited for assembly of components constructed from different materials.

- 5 Minutes Working Time at 18°C
- Cured Solid in 1 hour
- Mix ratio by volume 1:1
- Bonds Multiple Substrates
- Black Cured Colour

SUITABLE SUBSTRATES

BONDPRO 205 offers strong adhesion to various substrates, including wood, metal, ceramics, certain plastics, and composites. It creates durable bonds with exceptional shear strength.

HEALTH AND SAFETY

Gurit produces a separate full Safety Data Sheet for all hazardous products. Please ensure that you have the correct SDS to hand for the materials you are using before commencing work.

STORAGE AND HANDLING

Storage should be in a warm dry place out of direct sunlight and protected from frost. The storage temperature should be kept constant between 10°C and 25°C, cyclic fluctuations in temperature can cause crystallization.

BONDPRO 205 Resin	14months at 10-25°C
BONDPRO 205 Hardener	14months at 10-25°C

SURFACE PREPARATION

Ensure surfaces are clean, dry, and free of grease before applying the adhesive. Use an appropriate solvent, such as acetone or isopropanol, to degrease the surfaces. For metals like aluminium, copper, and their alloys, light abrasion with an emery cloth or similar material can help remove the oxide layer and improve adhesion.

UNCURED COMPONENT PROPERTIES

	BONDPRO 205 RESIN	BONDPRO 205 HARDENER
Appearance	Black	Off White
Viscosity @ 25°C	245 +/- 30 P	200 +/-30 P
Density @ 21°C	1.18	1.11

APPLICATION PROPERTIES

Mix Ratio by Volume	1:1
Gelation Time @ 21°C	5 Minutes
Handling Time @ 21°C	60 Minutes
Application Thickness @ 21°C	0.5 – 5 mm
Glass Transition DSC Tg°C	60 - 63°C

BONDING PERFORMANCE (Metals)

Lap Shear Strength (Steel)**	20 - 22 MPa
Lap Shear Strength ** (Aluminium)	20 - 22 MPa
Cleavage Strength* (Steel)	4.5 - 5.5 kN

*BS 5350 Part C1 **BS 5350 Part C5

BIO CONTENT AS STANDARD

DIRECTIONS FOR USE

Cartridge Application Instructions:

Prepare the Cartridge:
- Insert the cartridge into the application gun and align the plunger.
- Remove the cartridge cap and dispense a small amount until both components flow evenly.
- Attach the static mixer to the cartridge and begin dispensing, ensuring the adhesive is fully mixed (uniform black with no streaks).

Application:
- Apply the mixed adhesive to one of the substrates.

Assembly:
- Join the parts before the adhesive gels which is typically 4 minutes after mixing. The gelation time will depend on application thickness and ambient temperature.

Pot Life Considerations:
- Large quantities or higher temperatures will shorten the working time.

Curing Process:
- Apply clamping pressure for at least 1 hour or until the assembly reaches handling strength.
- Cure is achieved after 2 days at 21°C (73°F).

For professional or industrial use only. This Technical Datasheet (TDS) provides general guidelines and does not serve as a formal specification.

BONDING PERFORMANCE (Plastics)

Lap Shear Strength**	
Polycarbonate	2.8 MPa
ABS	3.3 MPa
Acrylic	2.6 MPa
Nylon 6	2.8 MPa
PVC	3.1 MPa
G10 Epoxy Laminate	14 MPa

**BS 5350 Part C5

STRENGTH DEVELOPMENT

Cure Time @ 21°C	Lap Shear Strength
8 Hours	8 MPa
24 Hours	13 MPa
48 Hours	17 MPa

CURED MECHANICAL PROPERTIES

Tensile Strength* (ISO 527-2)	30-35 MPa
Tensile Modulus* (ISO 527-2)	1.8-2 GPa
Tensile Elongation* (ISO 527-2)	15-20%
3 Point Flexural Strength* (ISO 178)	60 MPa
3 Point Flexural Modulus* (ISO 178)	1.9 GPa
3 Point Flexural Strain* (ISO 178)	5%

*Test temperature 23°C

NOTICE

CONTACT INFORMATION

Please see local contact information at www.gurit.com

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24-HOUR CHEMICAL EMERGENCY NUMBER

For advice on chemical emergencies, spillages, fires or exposures:

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