

## Ambient cure fast setting epoxy putty

### Description

Lapox Ultraseal Fast is a two component room temperature setting, easy to use multi-purpose epoxy putty. When both components are mixed in recommended ratio and cured appropriately at room temperature, excellent bond strength can be achieved with various substrates. Ultraseal can be used on damp surfaces for hard curing. Full cured putty can be sanded, drilled and painted adequately when cured between 10 to 45°C temperatures.

Epoxy putty has limitation and not recommended for bonding polyethylene and polypropylene substrates. It also not recommended use of epoxy putty in direct contact with portable water.

### Applications

#### General

Bonding metal, masonry, brick, glass rubber, fiberglass, composite, stone, marble and many rigid plastics

Sealing plumbing leakages of water pipelines and storage tanks

Joining broken ceramic, wooden and household items

Fixing loose screws on walls

#### Automobile

Filling of dents and cracks

Sealing leakages in radiators, fuel tanks, mufflers, silencers, metal strips

#### Marine

Sealing leakages in hulls of ships and boats

#### Electrical

Insulating Electrical connections

Sealing leakages in transformer systems to prevent oxidation

Sealing fuse and choke units of mercury lamps

Sealing motor terminals, balancing motors and armatures

Moisture proofing CI and plastic cables and cable joints

#### Civil Engineering

Sealing water supply mains, concrete, sewage pipelines

Filling and repairing Ceramics

### Typical specifications

Test	Unit	Reference	Value	
			Resin	Hardener
Description	-	Visual	Semi solid thick paste	Semi solid thick paste
Colour	Visual	Visual	Very light green	Black
Density at 25°C	gm/cc	ASTM B962-08	2.45 - 2.65	2.45 - 2.65
Solid Content by weight	%	--	100	100

### Mix specifications

Test	Unit	Reference	Value
Mixing ratio (resin : hardener)	w/w	-	1 : 1
Mix viscosity at 25°C	--	--	Putty
Mix Color	Visual	--	Dark grey
Mix Density	gm/cc	ASTM B 962-08	2.40 - 2.60
Peak Exotherm temperature <sup>1</sup>	°C	ASTM D 2471	Max 45
Working Time at 25°C	minute	ASTM D5895	15 - 17

<sup>1</sup>Total 50gm mix mass at 25°C

<sup>2</sup>For 50gm mix mass

## After cure specifications

Test	Unit	Reference	Value
Initial Hardening Time <sup>1</sup> (To reach Shore A value of 70)	Minutes	ISO / R 868	30 - 40
Nail Hardening Time <sup>1</sup>	Minutes	--	65 - 75
Lap Shear Strength at 25°C <sup>2</sup>	kg/cm <sup>2</sup>	ASTM D 1002	Min 70
Water Absorption (50gm mix mass) <sup>3</sup>	%	ISO 175 : 1999	Max 0.5
Tensile Shear Strength <sup>3</sup>	kg/cm <sup>2</sup>	ISO 527	Min 200
Martins Heat Deflection Temperature <sup>3</sup>	°C	--	Min 40
Compressive Strength <sup>3</sup>	kg/cm <sup>2</sup>	ISO 604	Min 400
Hardness (50gm mix mass) <sup>3</sup>	Shore D	ISO/R868	Min 80
Di-Electric Strength at RT	KV/mm	--	Min 10

<sup>1</sup>For 50 gm mix mass at 25°C

<sup>2</sup>Lap shear strength on prepared aluminum strips after 24hrs curing

<sup>3</sup>Checked after 24 hrs at 25°C

## Processing

### Surface Preparation

The adherents must be thoroughly degreased with a good degreasing solvent (e.g. toluene, acetone trichloroethylene) and abraded with coarse emery paper or chemically etched. Inadequately pre-treated substrates may not bond satisfactorily.

### Mixing of resin and hardener

Twist or Cut off equal amount (ratio 1: 1) of Ultraseal resin & hardener

Roll and knead putty until color is uniform black with no streaks within one minute

Place remaining product in to plastic seal wrap and store in sealed container to extend shelf life

### Application

Apply mixed putty within 2-3 minutes to surface, forcing in to cracks or holes. Remove any excess material before hardening begins.

### Curing schedule

Curing normally takes place at room temperature within about 24 hours depending on the ambient temperature but may be accelerated by the application of heat. In cold working conditions, heat the area to 40 - 45°C immediately prior to applying putty to dry off any moisture, contamination, or solvents, as well as to assist putty in achieving maximum adhesion properties.

## Packaging

Lapox Ultraseal Fast is available in 25g and 60g pack. Other packing may be considered on request.

## Storage and handling

Lapox Ultraseal Fast should be stored in a cool and dry place, preferably in a sealed container and should not be exposed to direct sunlight. This product has a shelf life of one year, if stored in its original container between 2°C and 40°C away from humidity and excessive heat.

## Safety

Wear personal protective equipment (PPE). Avoid contact with the eyes and skin. In case of direct contact and irritation, it should be washed off immediately with soap and warm water. Avoid breathing vapours, mist or gas. Please refer to the Safety Data Sheet (SDS) of Lapox Ultraseal Fast for detailed safety instructions.

## Spills and disposal

In case of spills, sweep up and shovel the spilled material. Keep spilled material in suitable, closed containers for disposal. Soak up with an absorbent such as clay, sand or other suitable material. Flush area with water to remove trace residue. Do not allow the product to reach the sewage system. Waste must be disposed of in accordance with federal, state or local regulations, as applicable.

# LAPOX® ULTRASEAL FAST SETTING

Technical Data Sheet | Polymers Business



## Contact

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