

# LOW VISCOSITY DRY EPOXY RESIN

## DH-200 Dry Type Low Viscosity

### Product Information

Epoxy injection material is used in small crack of the concrete material. It is a dry low viscosity injection material designed for grouting on bridges, dams, pillars, beams, slabs and many other parts. DH-200 shows high physical strength once hardened, and provides superior corrosion resistance and rust-proof characteristics, contributing to enhancing the concrete reinforcing effect. DH-200 has been widely used for recovery of concrete strength.



### Characteristics

Thanks to the high fluidity based on its low viscosity, it enables the easy penetration into the minute cracks or base members of the structure and also enables the perfect injection into the end side of minute cracks of concrete by minimizing surface tension. Depending on the site condition, you can choose one from low pressure grouting method, medium pressure grouting method and high pressure grouting method, which makes your injection of grouting material much easier. It is hardening slowly and leaves no shrinkage at all after hardening. Due to the low viscosity, it can infiltrate deep into the inside of cracks and the concrete layer of the base member of the structure, thus widens the overall bonding area and brings a strong bonding performance. And the excellent adhesive strength of epoxy resin ensures that the hardened composition makes a strong bondage with cement mortar, concrete and reinforcing bars etc. After epoxy resin is injected, the fully hardened composition does not create any chemical action on the reinforcing bars or concrete structure, and offers an outstanding durability by preventing corrosion.

### Usage

It is intended as grouting material for steel plate reinforcing and crack repairing of all types of concrete structure without vibration.

### Application Area

The treatment of concrete surface can be another way of securing durability and water-tightness for those cracks that have width of below 0.2mm, but it is used for the job sites where surface treatment and filling methods cannot prevent any water leakage from cracks, corrosion of reinforcing bars and carbonization etc. Main applications are as follows.

- Repair and reinforcement of minute cracks in the subway and tunnel
- Repair and reinforcement of minute cracks on PC plate, concrete molding products
- Grouting reinforcement of aged, weakened parts of concrete
- Repair and reinforcement of minute cracks on slabs and upper plates etc
- Waterstops treatment of wet leakage areas of concrete structures.

### DH-200 Dimension Details

Classification	Main Component	Hardening Component	Remarks
Exterior Appearance	No Color	Brown Liquid	
Mixing Rate	2	1	
Specific Gravity	1.11 ± 0.2	0.98 ± 0.02	23 ± 0.5°C
Viscosity(mPa.s)	180 ~ 220	60 ~ 80	23 ± 0.5°C
Mixture Viscosity(mPa.s)		220 ± 50	23 ± 0.5°C
Pot Life(Min)		60 ± 10	23 ± 0.5°C
Tack Free Time(Hours)		14 ± 5	23 ± 0.5°C
Hardening Time(Hours)		24~36	23 ± 0.5°C
Packing Unit	10 KG	5 KG	

### DH-200 Property Data

Test Category	Result Value	Base Value	Test Method	
Viscosity ( mPa.s )	240	Under 270	KS F 4923	
Compression Strength ( N/mm <sup>2</sup> )	87.3	Over 50		
Adhesive Strength ( N/mm <sup>2</sup> )	9.3	Over 6		
Seal Breaking Expansion Rate ( % )	9.6	Under 10		
Seal Strength ( N/mm <sup>2</sup> )	54.2	Over 15		
Hardening Contraction Rate ( % )	0.6	Under 3		
Heating Change (110±3°C,168hr)	Weight Change Rate ( % )	1.1		Under 5
	Volume Change Rate ( % )	1.4		Under 5

**Pot Life** the period of time during which you can work without a change in viscosity after resin and hardener are mixed.

**Tack Free** the state of hardening in which you can lightly touch the mixed resin with your hand, but the hardened material does not stick.

**Hardening Time** the time it takes for the mixed resin to be hardened enough to realize about 80% of final mechanical strength.