

# Quickmast SB

Solvent free, two part epoxy adhesive (formerly known as Probuild SB)



## Description

Quickmast SB is a fast set, solvent-free two-component epoxy adhesive specially designed to provide exceptional bond strength on concrete, steel and asphalt surfaces.

Quickmast SB is supplied in two parts of white and black colour that when mixed together in 1:1 ratio produce a uniform grey colour paste that can be used for permanent fixing and anchoring as well as a general-purpose epoxy adhesive.

## Applications

Quickmast SB is a fast set, high strength adhesive for use in the following applications:

- ▲ Anchoring and fixing of handrails, safety fence, reinforcement starter bars, dowel bars, wall ties, railway tracks and ground anchors.
- ▲ Permanent installation of traffic markers and road studs.
- ▲ It can be used as a general-purpose fast set epoxy paste for filling gaps, holes and surface irregularities, and for bonding of steel elements, natural stone, and polyethylene elements.

## Advantages

- ▲ Fast set.
- ▲ Easy to use.
- ▲ Rapid adhesive strength development.
- ▲ High tensile and shear strength.
- ▲ Exceptional bond to concrete and steel surfaces.
- ▲ 1:1 mixing ratio, making mixing easy and minimizing waste.

## Standards

Quickmast SB complies with AASHTO M235-91, Type I, II, IV and V, Class B and C for bond strength requirement by slant shear.

## Method of Use

### Surface Preparation

All substrate surfaces should be clean and free from dust, loose material, grease or any contamination.

## Technical Properties @ 25°C:

Bond strength to 25 MPa grade concrete @ 3 hr:	≥ 2 MPa (concrete failure)*
Bond strength to asphalt @ 3 hr:	≥ 2 MPa (asphalt failure)*
Specific gravity:	
Part A	1.45 ± 0.10
Part B	1.60 ± 0.10
Mixed material	1.50 ± 0.10
Slant shear bond strength: AASHTO T-237-73	≥ 45 MPa @ 7 days
Water absorption: ASTM D570-98	≤ 0.1%
Pot life: AASHTO T-237-73	10 ± 3 min
VOC: ASTM D2369	< 20 g/ltr (complies with LEED)

*\*Actual results depend on the mechanical characteristics of concrete and asphalt substrates.*

Bars should be free from any loose rust deposits. Holes are best made using a rotary percussive drill to provide rough sides followed by air or water flushing. If hole is cast, it should be of inverse dovetail configuration or mechanically roughened to provide a key.

Deformed or ribbed bars will give higher performance than smooth or other bar types.

Ceramic road studs or markers which are supplied with either resin-rich, waxy or greasy finishes should be abraded before use.

## Mixing

One part of component A should be mixed into one part of component B. To avoid waste only mix sufficient quantities that can be used within the pot life.

Components should be scooped from the tins and mixed together thoroughly using a spatula or palette knife in a suitable tin or board until a uniform grey paste is obtained.

**DCP Saudi Co.**  
Riyadh Offices:  
Exit 9, Al Izdehar, Beside ACDelco Petrol Station  
  
Jeddah Offices:  
Al-Henaki Business Center, Tower C



# Quickmast SB

## Application

### *For Anchoring & Fixing:*

Fill the mixed material into plastic cartridges and then inject using a skeleton gun. Once the mixed material is injected, the bar/bolt should be pressed and twisted into the adhesive.

### *For Fixing Traffic Markers & Road Studs:*

Apply the mixed adhesive to the area to be covered by the marker then press the marker into place so as to squeeze out a small bead of adhesive around the entire periphery of the marker. Markers should not be fixed until at least two weeks have elapsed from the time of laying asphalt, unless written approval is given by the engineer.

## Cleaning

All tools should be cleaned immediately after finishing by DCP solvent. Hardened material should be removed mechanically.

## Packaging

Quickmast SB is available in 10 kg pack (5 kg base and 5 kg hardener) and 40 kg pack (20 kg base and 20 kg hardener).

## Theoretical Coverage

For Road Studs: Approximately 15 - 30 ml/stud.

For Anchoring: The required quantity of adhesive needed is dependent on hole diameter, bar diameter and hole depth.

## Setting Time

Temperatuer (°C)	Setting time* (minutes)	Pot life (minutes)
6	160 - 170	70 - 90
12	120 - 130	50 - 70
16	80 - 90	40 - 60
20	40 - 60	25 - 30
25	25 - 30	10 - 15
30	10 - 18	8 - 11

*\* Maximum time interval at which the position of the traffic marker or studs can be slightly adjusted and move after installation.*

Setting time and pot life will vary depending on the temperature and size of the mix; extending at lower temperatures and smaller thickness of application. Pot life and set time are given in the table above were determined using a 200 g mix.

At temperatures above 25°C the material workability increases as does the rate of strength development. At temperatures lower than 25°C the material workability decreases and strength development slows.

## Storage

Quickmast SB has a shelf life of 12 months from date of manufacture if stored in a dry store at temperatures between 5°C and 30°C in original unopened packaging.

If these conditions are exceeded, contact DCP Technical Department for advice.

## Cautions

## Health and Safety

Gloves and a barrier cream should be used when handling these products.

If contact with the skin occurs, it must be removed, before setting, by washing with soap and warm water. Do not use solvent.

### **DCP Saudi Co.**

*Riyadh Offices:*

Exit 9, Al Izdehar, Beside ACDELco Petrol Station

*Jeddah Offices:*

Al-Henaki Business Center, Tower C

## More from Don Construction Products

A wide range of construction chemical products are manufactured by DCP which include:

- ▲ Concrete admixtures.
- ▲ Surface treatments
- ▲ Grouts and anchors.
- ▲ Concrete repair.
- ▲ Flooring systems.
- ▲ Protective coatings.
- ▲ Sealants.
- ▲ Waterproofing.
- ▲ Adhesives.
- ▲ Tile adhesives and grouts.
- ▲ Building products.
- ▲ Structural strengthening.

**DCP Saudi Co.**

*Riyadh Offices:*

Exit 9, Al Izdehar, Beside ACDelco Petrol Station

*Jeddah Offices:*

Al-Henaki Business Center, Tower C

# Quickmast SB



**DCP Saudi Co.**  
*Riyadh Offices:*  
Exit 9, Al Izdehar, Beside ACDelco Petrol Station  
  
*Jeddah Offices:*  
Al-Henaki Business Center, Tower C

**Note:**  
We endeavour to ensure that any information, advice or recommendation we may give in product literature is accurate and correct. However, because we have no control over where and how products are applied, we cannot accept any liability arising from the use of the products.

-  expertise
-  quality
-  full range

[www.dcp-int.com](http://www.dcp-int.com)

09-0016-A-2021