

# TECHNICAL DATA SHEET

## DOLPHIN POWERBOND EPOXY STEEL

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### PRODUCT DESCRIPTION

Dolphin Powerbond Epoxy Steel is an advanced, heavy-duty two-part adhesive that creates a high strength reliable bond in 4 minutes. Highly resistant to chemicals, moisture, and high temperatures up to 120 C.

### TECHNICAL PROPERTIES



Properties	Component	Specifications
Chemical Base	Part A - Resin	Black Paste
Chemical Base	Part - B Accelerator	Grey Paste
Cure Type		Resin + Accelerator (1:1 Ratio) & mix
Part A + Part B after Mixing @ 25°C, 50% RH		
Properties	Test Method	Specifications
Mixing Ratio (Part A + Part B)	-	1:1 (by weight)
Color	-	Grey
Consistency	-	Homogeneous paste
Density		1.9 ± 0.02
Gelling Time	Lab Test	4 - 5
Tack Free Time	Lab Test	Approx. 8 -10
As Cured Sample – 24 Hours @ 25°C, 50% RH		
Hardness (Shore D)	ASTM D2240	80 ± 5
Lap Shear Strength	ASTM D1002	90 kg /cm <sup>2</sup>
Compression Strength	Lab Test	900 kg / cm <sup>2</sup>
Non-Volatile content		100
Service Temperature (°C)	-	upto +120
Application Temperature (°C)	-	10 to 45

Note:

\* Curing time (Gelling Time & Tack Free Time) may vary depending on climatic condition during application.

(Information on this data sheet is subject to change without prior notice and should not be used for writing specifications)

### TYPICAL USES

- Interior & exterior application
- Excellent bonding of metal to metal
- Bonding with metal to wood, wood to wood.
- Good bonding in broken ceramic cups, glass
- Construction application
- Excellent engineering adhesive in automobile industry

### KEY FEATURES

- 100% Non-volatile product
- Excellent Adhesion
- No Shrinkage
- Non-corrosive
- Non-stain
- Printability
- DIY Product

<b>Color</b>	<b>Dolphin Powerbond Epoxy Steel</b> , Resin and Accelerator after homogenously mixing, mixture gets grey color.
<b>Packaging</b>	<b>Dolphin Powerbond Epoxy steel</b> in tubes is available in blister pack with 57 g (2 Oz) Resin tube and Accelerator tube 57 g (2 Oz).
<b>Surface Preparation</b>	The substrate areas that will be in contact with adhesive must be clean, dry, and free of all loose materials, dust, dirt, rust, oil, and other contaminants. If the surface to be applied is smooth, roughen with sand – paper for better adhesion
<b>Tooling and finishing</b>	Immediately tool adhesive after application and within the gelling time.
<b>Application instruction</b>	Cut nozzle. Unscrew nozzle on tubes. Can easily be extruded with hand pressure at temperatures between +10°C and 45°C. Apply the mixed mass on the surface to be bonded as soon as possible. If necessary, apply the pressure or clamps to hold the bonding
<b>Cleanup and removal</b>	Uncured adhesive can be removed by wiping but cured adhesive can only be removed mechanically or with nail polish remover (Acetone).
<b>Advantage</b>	Water (Latex) based paint paintable after 24 hours of curing. Additionally, we can do drilling. We can use this product for bonding, fixing, filling, repairing, sealing.
<b>Storage and shelf life</b>	When stored in original unopened container at or below 77°F (25°C) in dry warehouse conditions, DOLPHIN Epoxy Steel in tubes has a shelf life of 12 months from manufacturing date. Both tubes should always be kept sealed when not in use. Don't interchange caps in between both tubes.
<b>Handling precautions</b>	In case of contact with skin it may cause irritation or sensitization of skin. wash hands with plenty of water and soap. In case of contact with eyes, wash with plenty of water and consult physician immediately. If swallowed, it may be harmful. Keep away from children. While grinding, sanding, or drilling wear protective eyeglasses and dust masks. The cured mass of epoxy is generally nontoxic.

KEEP OUT OF REACH OF CHILDREN • KEEP CONTAINER TIGHTLY CLOSED • FOR INDUSTRIAL & POFESSIONAL USE

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