





# PIDILITE INDUSTRIES LIMITED

Marketing Division: P.B. No. 17411, Andheri (East), Mumbai 400 059 (India).

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## TECHNICAL DATA SHEET

**Fevicol PUR (1K) Moisture curing single – component Polyurethane adhesive.**

**Fevicol 1K PUR has excellent boiling water resistance and confirms to EN 204/D4 and JAS (BWSD) standards.** It also confirms to high heat resistance as per WATT91.

### PROPERTIES OF THE ADHESIVE

- Appearance : Clear light brown liquid.
- Viscosity @ 30 deg. C : 40 - 80 Ps.
- Open time : 10 to 15 minutes @ 30 deg. C. Higher temperature and higher percentage of moisture would reduce the open time.
- Handling time : 2 - 3 hours.
- Final Bond strength : 24 hours.
- Coating weight : 100 - 200 g/sq. m
- Application temperature : between 15 to 45 degree C.

### FIELDS OF APPLICATION

- Edge to Edge Joints,
- Finger Joint Applications
- Different Joint applications like Tenon and Morist Joints, Tongue and Grove Joints.
- Typical applications are in making frames of window, door, and wooden staircases where it gives an exceptionally high mechanical strength.
- Bonding of MDF board Joints
- **OTHER AREAS OF APPLICATION:** Meant for bonding wood, MDF, fiberboard, particleboard, metal, laminates, stone, ceramic, brick, foam, fiberglass, marble, leather, cork, drywall, mirrors, fabric, plaster, plasterboard, masonry, rubber, some plastics and many other substrates.

### Application Technique:-

(a) **Applicator:** - With spatula or hand roller from plastic squeeze bottle

(b) **Application Process :-**

- Surface to be bonded should be dry, clean, and free from oil and grease.
- Open the bottle lid by turning the yellow top anti-clockwise.

- Apply glue on one of the edges of the wood substrate / panel /plank / joint etc. in a thin layer by pressing the bottle downwards. Spread the glue uniformly on the edge with the help of spreader.
- Close the bottle lid after application by turning the top clockwise.
- Dampen the edge of the second wood substrate / panel /plank / joint etc to be bonded by spraying water.
- Bring the edges of both the substrates close to each other to assemble & clamp them firmly.
- Leave the assembly to set. It will set in 30minutes. De-clamp the substrates after 2 Hrs.
- During curing, the product creates foam & expands, which helps in filling gaps.
- A strong bond is achieved after 2 - 3 hours.
- Optimum strength will be realized after 24 hours at room temperature.

**(c) Curing: -**

Under influence of humidity, the product cures to a water- resistant, solvent resistant and weather resistance.

The cross-linking process can be accelerated by means of a targeted moisture supply by dampening the edge surface of the substrate / panel /plank / joint etc. by spraying water or by using moist cloths.

**(d) Clamping:-**

For sufficient contact of adhesive to the substrate under curing , adequate pressure through mechanized clamp is necessary. The required pressure and pressing time is dependent upon the type of wood (Hard wood, Soft wood), Porosity of the substrate (Porous and Non Porous) and size (length and width) of the material.

**(e) Final Setting Time:-**

- Subsequent processing of the bonded parts is possible after 2-3 Hrs. as strong bond will be obtained within this period.
- Optimum strength will be realized after approximately 24 hours at room temperature.

**(f) Cleaning:-**

- (g) Cleaning:- Excess or oozing out hardened adhesive can be mechanically removed softly. Application tools and machine parts can be cleaned by using Trichloroethylene.**

**Characteristics and Advantage of the product :-**

- Provide excellent boiling water resistance and confirms to EN 204/D4 and JAS (BWSD) standard.
- Excellent heat resistance & conforms to WATT 91 European Standard.
- Excellent weather resistance
- Fast setting adhesive that sets within 30 min. giving a very early initial handling strength. Final curing in 24 hours.
- Can penetrate difficult to access areas because of its optimized viscosity.
- Glue line can be painted. Easy sandability.
- Cost effective: 100% active ingredient. Does not contain fillers or solvents.
- Higher coverage: Product foams and spreads to a larger area thus providing higher coverage per gram.
- One side application: It needs to be applied only on one of the surfaces to be bonded.
- Wastage minimized: can be applied by nozzle at the required spot.
- Can penetrate difficult to access areas because of its optimized viscosity.
- Gap-filler: Curing is accompanied by foaming. This serves as gap filler to accommodate any irregularities in the substrates. Foam visible after curing can be easily sanded with emery paper.

## **PRODUCT GUIDELINES**

### **STORAGE**

Store in cool & dark shaded place away from the sunlight in tightly closed condition. Opened containers should be used up as soon as possible

### **SHELF LIFE**

- Nine months from date of manufacturing in factory sealed container.

### **PRECAUTIONS**

- The container should be capped immediately after use to avoid exposure to humidity.

**PACKING : - 500 Gm bottle.**

### **NOTE**

*The Product information & application details given by the company & its agents has been provided in good faith and meant to serve only as a general guideline during usage. Users are advised to carry out tests & take trials to ensure on the suitability of products meeting their requirement prior to full scale usage of our products. Since the correct identification of the problems, quality of other materials used and on-site workmanship are factors beyond our control, there are no expresses or implied guarantee/ warranty as to the results obtained. The company does not assume any liability or any consequential damage for unsatisfactory results, arising from the use of our products.*