

TECHNICAL DATA SHEET - TWO PART EPOXY STRUCTURAL ADHESIVE

A HIGH STRENGTH, NON-SHRINKING, ADHESIVE/POTTING COMPOUND

DEHERMAN Structural Epoxy is a unique two-part, rapid curing, and wood epoxy. The formula contains cellulose, nature's structural building block, to give the epoxy the strength, color, and behavior of natural wood. The cured epoxy can be sanded and stained, and easily outperforms standard wood glues. The high, gel-like viscosity of the formula allows it to adhere thick cross sections of wood without soaking into the surface and eliminates the need to clamp sections together.

PRODUCT BENIFITS

Low shrink rate
 No clamping needed
 Fills gaps
 Can bond dissimilar surfaces (e.g. wood to metal, plastic, ceramic, glass, cement stone, rubber, fiber, jewel, Electric components)
 Water resistant
 Insulation sealing
 Curing without cracking
 Low & high temperature resistance
 High bonding strength
 Wide range of application
 Long lasting seal
 Fast curing
 Impact resistant

ORDERING INFORMATION

PACKAGE SIZE: 2Kg Pack

DESCRIPTION

A high strength, non-shrinking, adhesive/potting compound specially formulated for high clarity, good impact strength, and water resistance. The adhesive bond is resistant to weathering, solvents, and wide variations in temperature.

FEATURES

- 100% reactive, no solvents`
- Good water and chemical resistance
- Fills gaps and voids
- Room temperature curing

RECOMMENDED APPLICATIONS

Bonding or potting Wood
 Components and assemblies
 Creating moisture-resistant seals
 Suitable for bonding ceramics, ferrous and non-ferrous, ferrites, wood, glass plastic, electronic components, and concrete

PRODUCT DATA

PHYSICAL PROPERTIES (UNCURED)

COLOUR	Clear
MIXED VISCOSITY	35000cps
MIXED RATIO BY VOLUME	1:1
MIXED RATIO BY WEIGHT	1.2:1
MIXED DENSITY	1.10 g m /c c
WORKING TIME @23 °C	8 – 12 minutes
FIXTURE TIME @23 °C	20 – 25 minutes
FUNCTIONAL CURE @ 23 °C	4 hours
FULL CURE	12 hours

PHYSICAL PROPERTIES (CURED) - 7 DAYS CURED AT 24°C

ADHESIVE TENSILE SHEAR, ASTM D1002	29-35 MPa
COVERAGE	100-300/m3
TENSILE ELONGATION	1%
SERVICE TEMPERATURE, DRY	-20 – 70 °C
CURED HARDNESS, ASTM D2240	85D
DIELECTRIC STRENGTH, ASTM D149	24 K V/mm
COMPRESSION STRENGTH, ASTM D695	60 MPa
WATER ABSORPTION	0.01%



APPLICATION INFORMATION

GENERAL SURFACE PREPARATION

Epoxy Adhesive works best on clean surfaces. Surfaces should be free of heavy deposits of grease, oil, dirt or other contaminants or cleaned with industrial cleaning equipment such as vapor degreasers or hot aqueous baths. Abrading or roughing the surfaces of metals will increase the microscopic bond area significantly and optimize the bond strength.

TYPICAL APPLICATIONS

Wood furniture
Wood Doors
Wood door & frames
Wood trims & Moulding
Metal to wood

APPLICATION

Apply mixed epoxy directly to one surface in an even film or as a bead. Assemble with the mating part within the recommended working time. Obtain firm contact between the parts to minimize any gap and ensure good contact of the epoxy between the mating parts, clamping may optimize this part of the process. A small volume of epoxy should flow out the edges to show there is adequate gap filling. For very large gaps, apply epoxy to both surfaces and spread to cover the entire area, or make a bead pattern, which will allow flow throughout the joint. Let bonded assemblies stand for the recommended functional cure time before handling. They are capable of withstanding processing forces at this point, but should not be dropped, shocked or heavily loaded.

STORAGE SHELF LIFE

DEHERMAN Epoxy Adhesives should be stored in a cool dry place when not used for a long period of time. A shelf life of 1 years from date of manufacture can be expected when stored at room temperature (22°C) in their original containers. The expiry will be displayed on the product packaging.

PRECAUTION

For complete safety and handling information, please refer to the appropriate Material Safety Data Sheets prior to using this product.

WARRANTY

DEHERMAN will replace any material found to be defective. Because the storage, handling and application of this material is beyond our control we can accept no liability for the results obtained.

DISCLAIMER

All information on this data sheet is based on laboratory testing and is not intended for design purposes. DEHERMAN makes no representations or warranties of any kind concerning this data.