

COLTECH COLTBOND

TECHNICAL DATA SHEET
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Single Component Polyurethane Adhesive

Product description

COLTECH COLTBOND is single component, solvent free, hard elastic, foaming, marine-grade polyurethane adhesive. It provides excellent elasticity, impact resistance, durability and chemical resistance properties with minimum shrinkage. COLTECH COLTBOND can be applied manually (trowel, roller, etc) or by airless spraying equipment.

Cures by reaction (cross linking) with surface and air moisture.

Uses

The COLTECH COLTBOND is a specialized Polyurethane adhesive for adhesion of wood to wood in Marine applications and exterior applications like:

- Wooden elements on Boats/Ships
- Wooden Garden Furniture
- Wooden Pergolas

The COLTECH COLTBOND is also used as a quick-setting adhesive for production of sandwich elements / Panels using:

- Aluminum
- Steel
- Wood
- Expanded & Extruded Polystyrene (EPS & XPS)
- Polyisocyanurate (PIR)
- Mineral Wool
- Honeycomb

Suitable for refrigerator panels and panels for exterior applications including seaside and other high humidity locations.

Advantages

- Solvent free
- Foaming
- Quick Curing
- Cold curing
- High Impact Strength & Vibration Resistance
- Moisture & Water resistant
- Salt water resistant
- Chemical resistant
- Over 20 years of positive feedback worldwide.

Consumption

0,050 – 0,200 kg /m2 depending on adhered materials and application method

Colors

The COLTECH COLTBOND is supplied in transparent-yellowish.

Technical Data *

PROPERTY	RESULTS	TEST METHOD
Composition	Polyurethane Resin Prepolymer. Solvent free.	
Hardness (Shore A Scale)	>80	ASTM D 2240
Solids Content	100 %	CALCULATED
Temperature Strength	120°C (Fully cured)	IN HOUSE LAB
Low Temperature Brittleness	-40° C (Fully cured)	IN HOUSE LAB
Open Time *	30-45 minutes	Conditions:20°C,50%RH
Removal Time from Press *	1-2 hours	
Final Curing time	7 days	

Chemical Properties

Water	+	Salt water 20%	+
Potassium hydroxide 5%	+	Hydrochloric Acid 5%	+
Domestic Detergents	+	Diesel Oil	+

{+ stable, - unstable, ± stable for a short period.}

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Application

Surface Preparation

Before adhering, make sure that all surfaces to be used are free of any trace of moisture (Maximum surface moisture content should not exceed 4%). Also make sure that the surface is not contaminated with oils, grease, dust, lubricants, release agents and other impurities that could prevent the adhesion.

Application

Stir COLTECH COLTBOND well before using.
COLTECH COLTBOND should have a temperature higher than 18°C during application.

Apply COLTECH COLTBOND adhesive with a trowel, brush or spray equipment to the one surface to be adhered.
On the other surface to be adhered spray some clean water and press together. Place adhered object in hydraulic press and allow curing.

ATTENTION: Please ensure adhesion (pressing) within Open Time.
RECOMMENDATION: Before use or change in surface to be adhered, make an adhesion test to make sure that adhesion is optional.
RECOMMENDATION: Use heated press (@40-45oC) to accelerate curing and to reduce removal time from the press.

Acceleration

The quantity of water that is sprayed onto the one of the two surfaces to be adhered accelerates the curing of the adhesive up to one point.
If the Pot life of the adhesive is to be adjusted further to the water spray, add the recommended quantity of the COLTECH C 298 catalyst / accelerator (from 0,05 to 0,1%) into the COLTECH COLTBOND and mix well, for about 3 min, by low speed mechanical stirrer. Allow mixture to rest for 5-10 minutes.

Packaging

Pails should be stored in dry and cool rooms for up to 9 months. Protect the material against moisture and direct sunlight. Storage temperature: 5^o-30^oC. Products should remain in their original, unopened containers, bearing the manufacturers name, product designation, batch number, and application precaution labels.

Safety measures

Please study the Material Safety Data Sheet. **PROFESSIONAL USE ONLY**

Our technical advice for use, whether verbal, written or in tests, is given in good faith and reflect the current level of knowledge and experience with our products. When using our products, a detailed object-related and qualified inspection is required in each individual case in order to determine whether the product and /or application technology in question meets the specific requirements and purposes. We are liable only for our products being free from faults; correct application of our products therefore falls entirely within your scope of liability and responsibility. We will, of course, provide products of consistent quality within the scope of our General Conditions of Sale and Delivery. Users are responsible for complying with local legislation and for obtaining any required approvals or authorizations. Values in this technical data sheet are given as examples and may not be regarded as specifications. For product specifications contact our R+D department. The new edition of the technical data sheet supersedes the previous technical information and renders it invalid. It is therefore necessary that you always have to hand the current code of practice.