

ECCOBOND[®] 286

Two Component, Room Temperature Curing, Versatile Epoxy Adhesive In Squeeze Tubes

Key Feature	Benefit
1 to 1 mix ratio	Quick handling

Product Description :

ECCOBOND 286 is a two component, room temperature curing epoxy adhesive designed specifically to bond to the widest variety of materials. ECCOBOND 286 is supplied in a cardboard box containing two squeeze tubes (Parts A & B) and a mixing stick. Equal volumes of each component are squeezed out side by side and then blended. The material is then applied to the mating surfaces. The proper amount of thixotropy is built in to assure minimum runout without sacrificing wetting. Only contact pressure is required. Initial set up is about 4 hours and complete cure in 24 hours.

Applications :

ECCOBOND 286 contains no solvent, volatiles or corrosive matter. Substrates may be porous or non porous. Materials which may be bonded with ECCOBOND 286 include aluminum, steel, stainless steel, copper brass, black iron, wood, porcelain, brick, paper products, PVC, PVDB, polycarbonate, neoprene, cellulose acetate, hardboard, most plated surfaces and surface treated teflon, polyethylene and polypropylene. ECCOBOND 286 is well suited to a wide variety of maintenance and production applications.

Properties Of Material As Supplied :

Property	Test Method	Unit	Value
Chemistry			epoxy
Appearance	Visual		white
Density	ASTM-D-792	g/cm ³	1,3 – 1,5
Viscosity at 25°C	ASTM-D-2393	Pa.s	TBD

Cure Schedule :

Please refer to the instructions for use above.

ECCOBOND 286 is generally accepted as the ideal adhesive for piping applications involving metal and plastic pipe. This single adhesive replaces solder on copper and brass pipe, solvent adhesives on plastic pipe and brazing on stainless steel pipe. The greatest virtue, however, is that it may be used to bond all of these different types of pipe in any combination such as plastic to copper, copper to stainless, etc.

Instructions For Use :

1. Surfaces to be bonded should be clean. Wash metal surfaces with solvent or detergent. Plastic surfaces should be tightly sanded.
2. Squeeze out equal lengths of ECCOBOND 286 Part A and ECCOBOND 286 Part B side by side on a piece of paper. Use the mixing stick and blend together until uniform in texture and colour.
3. Apply the blended material to both surfaces and mate. (Important : for piping applications, apply to pipe and socket. Rotate the pipe quarter turn during engagement.)
4. Allow about four hours for initial set at room temperature (25°C). Full cure will develop over the following 24 hours. Cure may be accelerated by using moderate heat.

Properties Of Material After Application :

Property	Test Method	Unit	Value
Hardness	ASTM-D-2240	Shore A	TBD
Flexural Strength	ASTM-D-790	MPa	80 minimum
Thermal Conductivity	ASTM-D-2214	W/m.K	1,0
Coefficient Of Linear Thermal Expansion	ASTM-D-3386	$10^{-4} K^{-1}$	36
Linear Shrinkage During Cure	ASTM-D-2566	%	TBD
Volume Resistivity	ASTM-D-257 at 25°C	Ohm.cm	10^{14} minimum
Dielectric Strength	ASTM-D-149	kV/mm	TBD
Moisture Absorption After 30 Days Immersion In Water	ASTM-D-570	%	TBD
Service Temperature	ASTM-D-794	°C	TBD
Elongation	ASTM-D-412	%	TBD
Tear Strength	ASTM-D-624	N/m	TBD
Tensile Lap Shear Strength 1,3 cm Overlap	ASTM-D-1002	MPa	12 minimum
Glass Transition Temperature	ASTM-D-3418	°C	TBD
Chemical And Solvent Resistance	ASTM-D-543		Excellent

Storage And Handling :

Store ECCOBOND 286 in well-sealed, closed containers at temperatures between 18°C and 25°C.

Storage Temperature (°C)	Usable Shelf Life (months)
18 to 25	12

Health & Safety :

It is recommended to consult the Emerson & Cuming product literature, including material safety data sheets, prior to using Emerson & Cuming products. These may be obtained from your local sales office.

Attention Specification Writers :

The technical information contained herein is consistent with the properties of the material and should not be used in the preparation of specifications, as it is intended for reference only. For assistance in preparing specifications, please contact your local Emerson & Cuming office for details. Please contact Emerson & Cuming Quality Assurance for test method details.

(ECCOBOND® is a registered trademark of National Starch and Chemical Company)
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