



## TECHNICAL BULLETIN #3001 – INSULBOND 5-171-1 EPOXY ADHESIVE

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Revised: 05/2018

### PRODUCT DESCRIPTION

**INSULBOND 5-171-1** is a clear, flowable epoxy resin adhesive designed for applications that require a high degree of peel strength, flexibility, and ability to bond to varied substrates. Curable at room temperature or mild oven temperatures, **INSULBOND 5-171-1** retains its

flexibility over a very broad range of temperatures, from -55°C to 150°C. It can be used to bond metals, glass, wood and many plastics, including vinyl. The pot life is over one hour, which allows for easy positioning of parts.

**PROPERTIES UNCURED**

	Part A	Part B	
COLOR	Amber	Amber	-
SPECIFIC GRAVITY	1.08	0.96	-
VISCOSITY, cps, 25°C	1.800	600	ASTM D 2393
MIXED VISCOSITY, cps, 25°C	1,250		ASTM D 2393
MIX RATIO, A:B	90:80		-
POT LIFE, hours	1-2		-
GEL TIME, hours	4-6		-

**PROPERTIES CURED**

PHYSICAL		
HARDNESS, Shore A	80-90	ASTM D 2240
TENSILE STRENGTH, psi	8,100	ASTM D 638
T PEEL, lbs/in, Stainless Steel	10-12	-
TITANIUM	9-10	-
KAPTON	4-5	-

**MIXING INSTRUCTIONS**

Add 90 parts of **INSULBOND 5-171-1** Part A to 80 parts of **INSULBOND 5-171-1** Part B by weight into a clean container. Mix thoroughly, this is important. Clean surfaces to be bonded with solvent or by etching to remove dirt, oil or grease. Apply **INSULBOND 5-171-1** to both surfaces if possible. Use a light clamping pressure to insure a bond line of about 3 mils without “starved areas”.

**CURE SCHEDULE**

Allow to cure for at least 24 hours at room temperature before handling. Application of heat will accelerate the cure and improve the tensile strength of the bond. Cure 48 hours at room temperature, 25°C (77°F) or 3 hours at 77°C (170°F).

**IMPORTANT:**

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**HEALTH CAUTION:**

Avoid breathing possible fumes, mists and vapors which can cause severe respiratory damage. Use of NIOSH approved breathing apparatus is required for more than minimal exposure. Always work in areas with adequate ventilation to allow dissipation of polyamine and other chemical fumes, and where applicable, solvent fumes. Use of goggles, protective garments, rubber gloves, protective cream is required. If material gets into eyes, flush thoroughly with clean water for twenty (20) minutes; then seek medical treatment. Avoid skin contact. Material can cause contact dermatitis. Always wash exposed areas immediately, using warm water and soap, followed by rinsing with clean water. Observe all safety precautions. It is important when using solvent based materials or solvents to keep away from open flame or ignition source.

**PLEASE REFER TO MATERIAL SAFETY DATA SHEET FOR FURTHER FIRST AID INFORMATION. FOR CHEMICAL EMERGENCY, CALL CHEMTREC (DAY OR NIGHT) 800 424-9300.**