



TECHNICAL DATA SHEET

TDS# 2731

DATE: JUNE 2013

BACON INDUSTRIES

FLEXOBOND 431

FLEXOBOND 431, a two-part clear urethane system, is widely used in the medical industry, meets USP XXII, Class VI-50°C/72 hours (ethylene oxide) Testing for Plastics. This urethane system does not contain TDI, mercury, tin or lead. It gels rapidly and cures to a rubbery solid. The system can be utilized as an adhesive, encapsulant or casting compound and has good adhesion to metals, glass, and plastics, especially polycarbonate. It may be cured at either ambient or elevated temperatures and can be handled in six hours from the initiation of ambient temperature cure.

RECOMMENDED MIXING AND HANDLING PARAMETERS

Resin	Flexobond 431
Activator	BA-431
Parts by weight of activator required per hundred of resin	58.3
Work life at Room Temperature (10 g), minutes	135
Gel Time at Room Temperature (10 g), minutes	150
Viscosity of FLEXOBOND 430 at 73°F, cp	770
Viscosity of Activator BA-430 at 77°F, cp	800
Viscosity of mixed material (100 g) at 77°F, cp	

<u>Minutes from time mixed</u>	<u>Viscosity, cp</u>
0	800
10	1,200
30	4,800
40	14,000
60	164,000

Recommended cure, hr/°F:	24/77 + 2/212
Alternate cure, day/°F:	3/77

TYPICAL PROPERTIES OF CURED ADHESIVE:

	<u>Rec. Cure</u>	<u>Alt. Cure</u>	<u>3 Weeks 77°F</u>
Color	Clear, sl yel	Clear, sl yel	Clear, sl yel
Specific Gravity	1.1	1.1	1.1
Hardness, Shore A	84	76	95
Hardness, Shore D	26	23	34
Lap Shear Strength to			
Aluminum (unprimed), psi	1300	800	-
Polycarbonate (unprimed), psi	700	300	-
Moisture Absorption, in water, %			
7 days at 77°F	0.1	-	-
7 days at 200°F	0.7	-	-

(over)

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