



TECHNICAL DATA SHEET

TDS# 2730

DATE: JUNE 2013

BACON INDUSTRIES

FLEXOBOND 430

FLEXOBOND-430 is a two-part clear urethane system which does not contain TDI, mercury, or lead. This system has unusually good wetting properties. It gels rapidly and cures to a rubbery solid. The system may be utilized as an adhesive, encapsulant or casting compound. FLEXOBOND-430 may be cured at either ambient temperature or elevated temperature. It generally can be handled in less than six hours from the initiation of ambient cure. This material is similar to the harder FLEXOBOND-425 and FLEXOBOND-431.

RECOMMENDED MIXING AND HANDLING PARAMETERS

Resin	Flexobond 430
Activator	BA-430
Parts by weight of activator required per hundred of resin	50.0
Work life at Room Temperature (10 g), minutes	100
Gel Time at Room Temperature (10 g), minutes	150
Viscosity of FLEXOBOND 430 at 77°F, cp	850
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
20	1,600
40	4,000
60	24,800
80	224,000
Recommended cure, hr/°F:	2/200
Alternate cure, day/°F:	1/77

TYPICAL PROPERTIES OF CURED ADHESIVE:

	<u>Rec. Cure</u>	<u>Alt. Cure</u>	<u>Weeks 77°F</u>		
			1	2	3
Specific Gravity	1.1	1.1	-	-	-
Hardness, Shore A	67	57	62	65	68
Hardness, Shore D	26	20	23	25	27
Color	Clear, sl amber	Clear, sl amber			
			<u>3 Weeks at R.T.</u>		
Lap Shear Strength to					
Aluminum (unprimed), psi	447			471	
Polycarbonate (unprimed), psi	665			690	

(over)

Moisture Absorption, in water,
% 30 days at 110°F

Rec. Cure

0.16

INSTRUCTIONS FOR USE:

FLEXOBOND-430 and Activator BA-430 are degraded by moisture and carbon dioxide. Keep containers closed tightly when not in use and prevent exposure of the two materials to contamination from any source. See also shelf life.

Both materials should be free of crystals and uniformly mixed before using. Mix at room temperature, in a hood ventilated to outside, 50.0 parts by weight of Activator BA-430 with 100 parts by weight of FLEXOBOND-430. Insure that both materials are uniformly mixed together. If bubble-free castings or seals are required, vacuum degas the mixture after mixing. All surfaces to be bonded must be clean and dry. Cure as recommended. It may be helpful to discuss other cures with a Bacon Technical Representative.

FOR INDUSTRIAL USE ONLY! WARNING! VAPOR HAZARDOUS!

CAUTION: Use with adequate ventilation. Avoid contact with skin or clothing. In case of contact, flush immediately with plenty of water. Keep containers tightly closed when not in use.

WARNING: Activator BA-430 contains an isocyanate which is a strong skin sensitizer and may cause severe irritation to mucous membranes. Avoid contact with skin and eyes and avoid breathing vapors. In case of skin contact, wash promptly with 99% isopropyl alcohol (rubbing alcohol is NOT suitable) to remove activator, then soap and water. Curing ovens should be ventilated outdoors. All users should wash thoroughly. If uncured material or FLEXOBOND-430 or Activator 430 gets into eyes, flush with water for 15 minutes. Also, call a physician at once. See MSDS for more detailed information.

SHELF LIFE:

The Shelf Life of FLEXOBOND 430 is greater than twelve months when stored at an ambient temperature of 80°F or below, in an unopened container.

The Shelf Life of Activator BA-430 is greater than six months when stored between 85°F and 95°F in unopened containers. Storing above 95°F tends to speed up the aging process, and storage below 80°F can result in crystallization of the material. If crystallized, it must be decrystallized at 140°F until clear by placing the partially open container in an air circulating oven ventilated to outside. The total period of time at 140°F should not exceed three hours. Use of a positive air mask is strongly recommended. Although the crystallizing does not damage the product, decrystallizing will be necessary, and this situation should be avoided. Both FLEXOBOND-430 and Activator BA-430 are moisture sensitive and containers should be tightly capped. Back-filling partially empty containers with dry nitrogen is recommended. It is best to use a new container and cover if the original container has been damaged during opening and does not then provide a tight seal. Only a rubber capping chuck should be used for screw top covers.

AVAILABILITY:

FLEXOBOND-430 is available in 55 gallon drums containing 400 lb net, gallon oblong screw-top cans containing 8 lb net, quart and pint cone top cans with screw caps containing 2 lb and fib net, respectively. Activator BA-430 is also available in the same five sizes and respective weights, except the drum contains 500 lb net.