

300 Eisenhower Lane N. Lombard, IL 60148 USA (630)495-2001 cs@saftlok.com www.saftlok.com

Ethyl Series Instant Bonders

Technical Data Sheet

TECHNICAL SUPPORT

Our technical support team stand ready to assist you with your technical questions regarding your SAF-T-LOK products. On-Site support when necessary within 24 hours.

PART NUMBERS

IB 5	40521,31,41,51
IB 20	42021,31,41,51
IB 45	44501,21,31,41,51
IB 100	41001,05,21,31,41,51
IB 300	43001,21,31,41,51
IB 600	46021,31,41,51
IB 1500	41521,31,41,51
IB 2500	42521,31,41,51

SPECIFICATIONS

Product	MIL-A-46050C	A-A-3097
IB 5	II/1	ii/1
IB 45	II/1	ii/1
IB 100	11/2	II/2
IB 1500	11/3	II/3
IB 2500	11/3	II/3

TURNKEY SOLUTIONS

As an ISO 9001:2008 certifed company, SAF-T-LOK can design or refine products to fit your companies specific needs and requirements.

For more information on any of our products or services please visit us on the Web at: www.saftlok.com

GENERAL INFORMATION:

SAF-T-LOK cyanoacrylate adhesives are a specialized series of single component, solvent free liquids that are individually formulated for instant bonding of mated metals, plastic or rubber parts and assemblies.

Instant Bonder adhesives cure at room temperature without pressure to provide exceedingly high bond strengths. Cure is catalyzed by weak alkaline materials including, trace amount of moisture on the surface of parts to be bonded. Shrinkage is negligible because Instant Bonder adhesives contain 100% reactive materials. Solvent resistance is very good.

PRODUCT DESCRIPTION:

SAF-T-LOK Ethyl Series Instant Bonders are offered in various grades, which were developed to provide a range of viscosities for specific bonding requirements with engineered substrates. This ethyl series of cyanoacrylate products satisfies most application requirements. The range of viscosity permits selection of a product thickness to accommodate the bonding gap of specified assemblies.

PHYSICAL PROPERTIES:

State: Liquid								
Product	IB 5	IB 20	IB 45	IB 100	IB 300	IB 600	IB 1500	IB 2500
Viscosity (cps)	5	20	45	100	300	600	1500	2500
Gap Fill (in)	0.002	0.003	0.004	0.005	0.006	0.007	0.010	0.015
Vapor Pressure, mm Hg @70°C	10	10	10	10	10	10	10	10
Specific Gravity, @ 77°F / 25°C	1.04	1.05	1.06	1.08	1.09	1.09	1.10	1.10
Refractive Index, n20C/D+/03	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Solubility Parameter	10.8	10.8	10.7	10.7	10.7	10.7	10.7	10.7
			State: So	lid				
Boiling Point	365°F	365°F	365°F	365°F	365°F	365°F	365°F	365°F
Softening Point	311°F	310°F	306°F	306°F	304°F	302°F	301°F	301°F
Heat Distortion	304°F	292°F	250°F	250°F	245°F	245°F	240°F	240°F
Glass Transition	347°F	345°F	342°F	342°F	341°F	341°F	340°F	340°F
Volume Shrinkage. %	15	14	13	13	13	12	12	12
Rockwell Hardness, M	75	75	74	74	73	73	72	72
Cured Temperature Range Outgassing, 10^6mmHg, 72°F Elongation, %	-65°F to 180°F (54°C to 82°C) 0<2							
Dielectric Constant, 1 mhz	3.98	3.94	3.9	3.89	3.87	3.85	3.79	3.77
Volume Resistivity, ohm- cm(x10^12)	8.6	8.5	8.5	8.5	8.5	8.4	8.4	8.3
		St	rength D	ata:				
Impact. Ft-lbs, ASTM-D950	3 to 5	4 to 6	7 to 10	3 to 5	3 to 5	3 to 5	4 to 6	4 to 6
Tensile, Steel, psi, ASTM- D2095	4000 (±10%)	4000 (±10%)	4000 (±10%)	4000 (±10%)	4000 (±10%)	4000 (±10%)	4000 (±10%)	4000 (±10%)
	Te	nsile Sh	ear, ps <mark>i,</mark> .	ASTM-D	1002:			
Steel	2700 (+10%)	2700	2700	2400	2300	2300	2200	2000

	(±10%)	(±10%)	(±10%)	(±10%)	(±10%)	(±10%)	
*Substrate Failure (adhesive bond was stronger than substrate)							

(±10%)

1600

SF*

SF*

100

(±10%)

1600

SF'

SF*

100

(±10%)

1600

SF'

SF*

100

(±10%)

1600

(±10%

SF*

SF*

100

(±10%)

1600

SF*

SF*

100

 $(\pm 10\%)$

(±10%)

(±10%)

1600

SF*

SF*

100

 $(\pm 10\%)$

Note: These products are not recommended for use on pure oxygen systems.

(±10%)

1600

SF*

SF*

100

Aluminum

Rigid PVC

EPDM

ABS

(±10%)

1600

SF*

SF*

100

IMPORTANT NOTICE: All statements and technical data contained herein are based on tests we believe to be reliable, but the accuracy of completeness thereof is not guaranteed. It is recommended that the buyer test this product to determine its suitability for his application before use. **SAF-T-LOK International Corporation** is not responsible for loss, claim or damages resulting from use of its products.