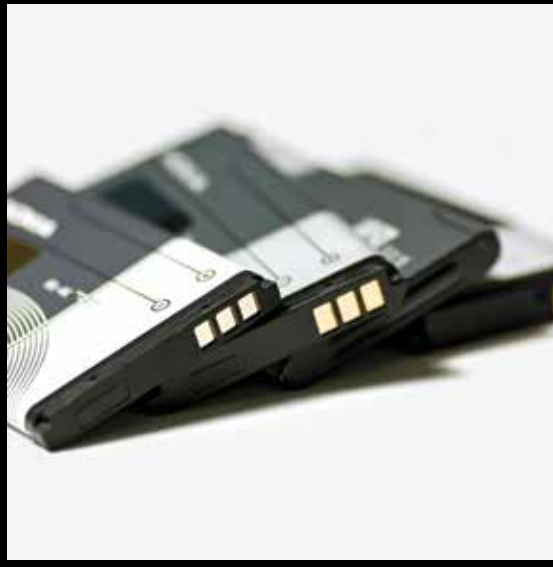


KRYLEX[®]

ELECTRONIC ASSEMBLY SOLUTIONS



SOLUTIONS OVERVIEW

In the constantly evolving world of electronics, hardware manufacturing becomes less costly and more efficient by the replacement of mechanical fasteners with adhesives. Chemence® has leveraged over 30 years of adhesive and sealant expertise to craft their specialty line of KRYLEX® electronics assembly solutions. With a pedigree in developing adhesives ranging from consumer use to high purity medical grades, Chemence® now proudly brings you specialty adhesives and sealants for electronic assembly applications in mobile devices, wearable technology, notebook computers, consumer electronics accessories and more. Chemence® partners with electronic manufacturers and designers to develop custom solutions for applications ranging from cover screen bonding to speaker assembly to battery assembly. Contact one of our experienced application experts to find out how our range of Light Cure Adhesives, Cyanoacrylates, Silicones and Polyurethane Hot Melts hold the right solution for your manufacturing issues.

Characteristic	Cyanoacrylates	Polyurethane Hot Melts	Light Cure Adhesives	Silicones
Bond Strength	Good	Excellent	Excellent	Fair
Impact Resistance	Fair	Excellent	Good	Excellent
Fast Fixture	Excellent	Good	Excellent	Fair
Simple Processing	Excellent	Fair	Fair	Excellent
KRYLEX® Products	<p>KBX9024 Highly Flexible</p> <p>KB014-LO Low Bloom Ultra-Fast Fixture</p> <p>KBX0904 High Toughness Machinable</p>	<p>KH109 Excellent Overall Performance</p> <p>KH401 Excellent Light Absorbance for LCM Side Sealing</p> <p>KHC18226 Thermally Conductive</p>	<p>KU3104 Dual Cure, Non-Irritant</p> <p>KU1153 Tack-free Surface Cure</p> <p>KU3114 High Viscosity Dual Cure</p>	<p>KSC2040 Thermally Conductive Non-Corrosive</p> <p>KS12028 Repenetrable Gel for Encapsulation</p> <p>KSC1802 Thermally Conductive Potting</p>

CYANOACRYLATES

Chemence® has been a global leader in cyanoacrylate chemistry for over 30 years. Our new line of specialized cyanoacrylate products for the electronics market includes ultra-fast fixturing, low bloom products as well as innovative two component cyanoacrylates designed with high toughness and flexibility that traditional CAs lack. While striving to continuously push the boundaries of cyanoacrylate chemistry, we've managed to maintain all the great properties that manufacturers appreciate: rapid cure without heat or light and great adhesion to the widest range of substrates.

Product	Key Characteristic	Viscosity (cPs) ^A	Tensile Strength (psi) ^B	Fixture Time (s) ^C
KB064-LO	Low Viscosity, Low Bloom, Ultra-Fast Fixture	5	2550	10
KB014-LO	Medium Viscosity, Low Bloom, Ultra-Fast Fixture	100	2900	15
KB314-LO	High Viscosity, Low Bloom, Ultra-Fast Fixture	600	2360	15
KB150C	High Temperature Resistance	400	1950	10
KBX0904	High Toughness, Machinable	Gel	2800	30
KBX9024	High Elongation, Good Impact Resistance	Gel	2900	15
KP1137	Cyanoacrylate Activator	1	N/A	N/A
KP687	Cyanoacrylate Debonder	1	N/A	N/A

^A Brookfield at 25°C

^B On mild steel

^C Time to achieve handling strength on steel

LIGHT CURE ADHESIVES

KRYLEX® Light Cure Adhesives are ideal for bonding non-opaque materials instantly and on-demand. Our one component, no mix products cure in seconds once exposed to the appropriate wavelength of light. KRYLEX® Light Cure Acrylate adhesives offer bond-on-demand capabilities allowing for unlimited repositioning time. KRYLEX® Light Cure Cyanoacrylate adhesives offer dual-curing technology for shadowed areas of the bonded assembly that don't allow light penetration.

Product	Category	Key Characteristic	Color	Viscosity (cPs) ^A	Depth of Cure (mm)	Cure Type
KU503	Acrylic	Excellent Adhesion, High Toughness	Clear	7000	2	UV
KU1053	Acrylic	PVC & PC Bonder, Flexible	Clear	250	2	UV
KU3453	Acrylic	High Strength Glass/Metal Bonder	Clear	1500	2	UV
KU1055	Acrylic	Flexible, Fast Cure	Clear	3300	3	UV
KU223	Acrylic	Excellent Adhesion, High Toughness	Clear	3250	4	UV
KU1153	Acrylic	Tack-Free Cure	Clear	1750	5	UV
KU3064	Cyanoacrylate	Dual Cure, Non-Irritant	Transparent/Green	20	10+	UV/Vis, Moisture
KU3104	Cyanoacrylate	Dual Cure, Non-Irritant	Transparent/Green	150	10+	UV/Vis, Moisture
KU3114	Cyanoacrylate	Dual Cure, Non-Irritant	Transparent/Green	800	10+	UV/Vis, Moisture

^A Brookfield at 25°C

POLYURETHANE HOT MELTS

KRYLEX® offers a wide range of Polyurethane Hot Melts designed specifically for high performance structural bonding of mobile devices and batteries. Our Polyurethane Hot Melts offer a variety of benefits over traditional structural bonders including:

- Great adhesion to plastics, metals, composites and glass
- Short, medium and long open times
- One-part, solvent free formulations
- Fast fixture times
- Very thin bondlines
- Great impact resistance

Product	Key Characteristic	Color	Viscosity (cPs) ^A	Application Temperature	Open Time (min) ^B
KH101	High Green Strength, Short Press Time	White	4000 @ 120°C	110°C	3
KH101B	High Green Strength, Short Press Time	Black	4000 @ 120°C	110°C	3
KH102	Very High Green Strength	White	4000 @ 120°C	110°C	1.5
KH106	High Final Bond Strength	White	6000 @ 120°C	115°C	>10
KH106B	High Final Bond Strength	Black	6000 @ 120°C	115°C	>10
KH108	High Final Bond Strength	White	3000 @ 120°C	100°C	>10
KH108B	High Final Bond Strength	Black	3000 @ 120°C	100°C	>10
KH109	Excellent Overall Performance	Light Yellow	3000 @ 120°C	100°C	4
KH401	Jettable, Excellent Light Absorbance	Black	2000 @ 100°C	105°C	<1
KHB8636	High Tack, Battery Membrane Bonder	White	8000 @ 120°C	140°C	3
KHB8636B	High Tack, Battery Membrane Bonder	Black	8000 @ 120°C	140°C	3
KHC18226	Thermally Conductive, 0.5W/mK	Grey	16000 @ 160°C	180°C	<0.5

^A Brookfield at 25°C

^B Dependent on bondline and substrate

SILICONES

KRYLEX® Silicones enable the development and manufacturing of electronic assemblies that are more powerful, efficient and versatile than ever before. Our thermally conductive products are ideal for minimized heat build-up on electronic components. KRYLEX® Silicones provide better resistance to heat and cold, thermal shock, oxidation, moisture and chemicals over traditional organic adhesives.

Product	Category	Key Characteristic	Color	Viscosity (cPs) ^A	Durometer	Tack Free Time (min)
KS130	Oxime	Excellent Plastic Adhesion Including Tygon® & Polyolefins	White	400000	A35	20
KSC2040	Oxime	Thermally Conductive, Excellent Adhesion	Gray	600000	A40	20
KSC1202	Pt Catalyzed	Two Part, Thermally Conductive	White/Pink	150000	00 70	60 (5 @ 150°C)
KSC1802	Pt Catalyzed	Two Part, Thermally Conductive	White/Pink	14000	00 70	60 (5 @ 150°C)
KS12028	Pt Catalyzed	Repenetrable Gel / Low Viscosity	Clear	1000	N/A	120 (15 @ 150°C)

^A Brookfield at 25°C



WEARABLE TECHNOLOGY SOLUTIONS

Structural Bonding
Sensor Encapsulation
Flex Attach Encapsulation
Barrier Sealants
Conductive Adhesives
Stereolithography Resins



NOTEBOOK COMPUTER SOLUTIONS

Touch panel Bonding
Frame, Cover Structural Bonding
Battery Bonding and Sealing
Cure-In-Place Cushioning and Gasketing
Sub-Assembly Bonding and Sealing
Camera Lens bonding



MOBILE PHONE SOLUTIONS

Cover Bonding
Frame bonding
Flat-Panel Speaker Assembly
Keypad, Side Key Bonding
Logo Bonding
Camera Assembly
Battery Bonding and Sealing
Accessory Assembly



HEADPHONE/SPEAKER ASSEMBLY SOLUTIONS

Frame, Housing, Sub-Enclosure Assembly
Front Cover Sealing
Magnet Bonding
Combox, Remote Cover Bonding
Membrane – Voice Coil Bonding
Wire Fixation
Stereolithography Resins

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