Product Datasheet

Ultralane® 765A/B and 765A/C

LOW VISCOSITY, POLYURETHANE ADHESIVE SYSTEM

Ultralane® 765A/B and 765A/C are two-part polyurethane adhesives that are designed for bonding sandwich-panels made from materials such as aluminum, foam, honeycomb cores, and plastic skins. It performs well over a wide range of environmental conditions from sub-zero to elevated temperatures and has excellent resistant to moisture and humidity plastics with minimal surface preparation. It has been successfully used for bonding polycarbonate, ABS, nylon, and Metton®.

The Ultralane® 765A/B system has a long work-life and the 765A/C system has a shorter work-life. Otherwise the systems are identical in performance. Both systems are MOCA, TDI, and VOC free and are fully RoHS and REACH compliant.

These adhesives can be supplied in custom colors and viscosities or in softer/more elastic or harder/stiffer versions. Please contact us to discuss your application if you'd like to receive samples of a custom color or to discuss the development of a custom variant that would be suitable for your application.

BENEFITS:

- Bonds a wide variety of materials including plastics, metals, and foams
- Can be roll coated or spray applied
- Excellent Peel Strength

HANDLING PROPERTIES	VALUE	TEST METHOD
Ultralane 765A (resin)		
Visual Appearance	Brown liquid	
Density, Part A	1.24 g/cm³	ASTM E-201
Viscosity, Part A, @ 25ºC	250 cps	ASTM D-2393
Flash Point	>100°C	ASTM D-92
Ultralane 765B & 765C (hardener)		
Visual Appearance	Beige, flowable liquid*	
Density,	1.64 g/cm³	ASTM E-201
Viscosity, Part B, @ 25ºC	22,000 cps	ASTM D-2393
Flash Point	>100°C	ASTM D-92
Mix Viscosity	6,000 cps	ASTM D-2393
Mix Ratio by weight	20A: 100B or C	
Mix ratio by volume:	25A : 100B or C	
Pot life, 100 gram mass – 765A/B	70 - 90 minutes	
Pot life, 100 gram mass – 765A/C	8-10 minutes	

*Black, white, and custom colors available by request

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Processing & handling times – 765A/B:	25ºC/ 77ºF	60ºC/140ºF	100ºC/ 212ºF
Handling strength	16 hours	2 hours	15 minutes
90% of Final Strength	24 - 48 hours	3 hours	30 minutes
Full Cure strength	3 – 7 days	4-6 hours	60 minutes
Processing & handling times – 765A/C:	25ºC/ 77ºF	60ºC/140ºF	100ºC/ 212ºF
Handling strength	4-8 hours	1 hours	5 minutes
90% of Final Strength	12 - 16 hours	1.5 hours	15 minutes
Full Cure strength	24- 48 hours	2 hours	30 minutes

CURED PROPERTIES	VALUE	TEST METHOD
Hardness, Shore D	50 ± 10	ASTM D-2240
Tensile Lap Strength (etched aluminum to etched aluminum)		ASTM D-1002
At -4ºF (-20ºC)	2650 psi	
At 68ºF (20ºC)	2300 psi	
At 104ºF (40ºC)	1850 psi	
At 140ºF (60ºC)	750 psi	
Tensile Elongation	30%	ASTM D-638
Drum Peel Strength		ASTM D-1002
At -4ºF (-20ºC)	21 pli	
At 68ºF (20ºC)	26 pli	
At 104ºF (40ºC)	28 pli	
At 140ºF (60ºC)	22 pli	
Glass Transition Temp (Tg) per DMA	127ºF (53ºC)	ASTM D-4065

PROCESSING AND APPLICATION INSTRUCTIONS :

To use, weigh Part A and Part B into a clean mixing container. Mixing containers should preferably be made of polypropylene, polyethylene, glass, or non-corroding metal. (Stainless steel, aluminum, etc.). Always use weighing equipment having accuracy that is ±1% or less of the smallest quantity that you will be weighing. Blend Part A & B thoroughly using a spatula or stirring stick for at least 2 minutes using a kneading motion. Scrape the bottom and sides of the mixing container carefully and frequently to produce a uniform mixture. For bubble-free bond-lines vacuum degas after mixing. This system is also very easy to use with most meter-mix dispensing systems.

The mixed adhesive mix can be applied with a spatula, stiff brush, or other tool to the dry Surfaces to be bonded. A layer of adhesive 0.001 to 0.005 inches thick will normally impart the greatest lap shear strength to a joint. The bonded surfaces should be assembled and clamped as soon as the adhesive has been applied. Even contact throughout the bond-line suffices to ensure proper cure and a strong bond.

PACKAGING AVAILABLE:

This product is available in 50ml, 200ml, & 400 dual syringes. The dual syringe cartridges eliminate the need for hand mixing and allow for air-free mixing and easy application to your

bond-lines. It can also be supplied in pint, quart, gallon, 5-gallon pail, and drum package sizes. Please call use with any special packaging requests or for information on custom kitting.

STORAGE GUIDELINES:

Store these materials in a clean, cool and dry environment in their tightly closed original containers. Protect from extended exposure to temperatures below 15ºC (59ºF). Crystallization may occur if the material is exposed to cold for extend periods. If this occurs, heat the entire container for 4 hours at 60ºC to re-liquefy the material. Allow to cool to ambient temperature prior to using. Also protect from exposure to moisture or high humidity. Tightly re-seal containers after use. If the recommended storage conditions are observed the products will have a minimum shelf-life of 12 months from the date of shipment.

HANDLING PRECAUTIONS:

Mandatory and recommended industrial hygiene procedures should be followed whenever these products are being handled and processed. For additional information please consult the corresponding material safety data sheets.

PERSONAL HYGIENE:

Ultralane 765A - WARNING! Harmful if inhaled. Causes skin and eye irritation. Causes allergic skin and respiratory reaction. Avoid contact with eyes, skin, and clothing. Avoid breathing vapor or mist. Avoid prolonged or repeated contact with skin. Keep container closed. Use with adequate ventilation. Wash thoroughly after handling.

Ultralane 765B and 765C - WARNING! Can cause eye, skin, and respiratory irritation. Prolonged or repeated skin contact or inhalation of vapors may cause allergic skin or respiratory reactions. Harmful if inhaled or swallowed. Avoid contact with eyes, skin, or clothing. Wear eye protection and impervious gloves when handling. Wash thoroughly after handling. Avoid breathing vapor or mist. Keep containers closed when not in use. Use only with adequate ventilation.

FIRST AID

In case of contact: **Skin** – Immediately wash skin thoroughly with mild soap and water. Remove contaminated clothing and wash before reuse. Destroy contaminated shoes and other articles made of leather. **Eyes** – Immediately flush eyes with plenty of water for 15 minutes and get prompt medical attention. **Inhalation** - Remove person to fresh air. Administer oxygen or artificial respiration if necessary. Call a physician. **Ingestion** - Do not induce vomiting. Dilute with plenty of water and contact physician immediately. Never give anything by mouth to an unconscious person.

DISCLAIMER:

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