KRYLEX® Adhesives and sealants

KA303

2 Part Acrylic Adhesive

Document No: KX-01-600-2800
Issue: 2
Amendment:
Date: 27.02.2012
Page 1 of 1

TECHNICAL DATA

PRODUCT DESCRIPTION

KRYLEX® KA303 is a two component, toughened acrylic adhesive system, which must be cured with ***KRYLEX®*** KP0757 Liquid Activator. KA303 does not require mixing prior to use and cures to give a tough, impact resistant bond with good peel strength.

TYPICAL APPLICATIONS

KRYLEX® KA303 will bond a wide variety of substrates, including metals, woods, ferrites, ceramics, glass, many plastics, stone, etc. It is particularly good for bonding dissimilar materials. Typical applications include sporting goods, appliance assembly, furniture assembly, bonding handles in place, etc.

PROPERTIES OF MATERIAL

		Value
Chemical type		Methacrylate esters and high mol. wt. elastomers
Appearance		Pale Cream
Specific Gravity		1.03
Viscosity[1] cPs	(Range)	17,500-26,000
	(Typical Value)	22,000
Tensile Shear Strength[2], N/mm^2		
(24 Hrs)	Range	15-22
Initial Fixture Time[3]	(secs)	90
Full Cure	(Hrs)	24
Tensile Strength[4]	(24 Hrs)	
N/mm^2,	Range	13-20
Flash Point	(°C)	> 100
Shelf Life @ 20°C	(Months)	12
Temp Range °C	Intermittent	-50 to +120
	Continuous	-50 to +150

1 Brookfield RVT, spindle 4, @2.5rpm, @25°C
2 ASTM D1002, on steel, cured with KP0757
3 To achieve 1N/mm^2 in ASTM D1002, on steel, cured with KP0757
4 Grit blasted mild steel to glass, ASTM D2095-69

CURING PERFORMANCE

Cure performance is as indicated in the table above. Cure speed will be reduced if cured at low temperatures. In Tensile shear tests, (ASTM D1002, on steel, cured with KP0757) KA303 achieved handling strength of 4 N/mm^2 after 5 minutes.

Cure Speed vs. Substrates

KRYLEX® KA303 cures faster when one of the substrates to be bonded is a metal, due to the anaerobic nature of the product.

Cure Speed vs. Temperature

All figures relating to cure speed are tested at 20°C. Lower temperatures will result in slower cure. Heating the assembled parts accelerates the curing process.

GENERAL INFORMATION

For safe handling of this product consult the Material Safety Data Sheet. **Important:** Product packed in bulk (≥5kg) has a shelf life of 6 months. The material must be filled into smaller bottles/tubes within this time period.

TYPICAL ENVIRONMENTAL RESISTANCE

Hot strength

KRYLEX® KA303 is suitable for use at temperatures up to 130°C. At 130°C the bond strength will be approximately 10% of the strength at 21°C.

Heat ageing

KRYLEX® KA303 retains over 95% full strength when heated to 100°C for 90 days then cooled and tested at 21°C.

Chemical / Solvent Resistance

KA303 has good environmental resistance to water and other solvents.

DIRECTIONS FOR USE

For best results, ensure parts are clean, dry and free from oil and grease, although good bonds can still be achieved on 'as received' or slightly oily parts.

KRYLEX® KA303 adhesive should be applied to the most absorbent surface in beads or spread as a thin layer using a flat edge.

KP0757 activator should then be brushed onto the least porous substrate and allowed to evaporate for at least 1 minute.

The two parts should then be brought together and clamped or held in position to achieve best results.

STORAGE

Optimal storage conditions are between 8°C and 21°C. Storage outside this temperature range can adversely affect product properties and may reduce the stated shelf life. **Please Note:** When packed KP0757 requires an air space above the product to maintain stability.

PRESENTATION

80ml + 20ml kit
(80ml KA303 cartridge + 20ml brush top bottle of KP0757).

315ml cartridges KA303.

5kg and 25kg of KA303 bulk for possible use with dispensing systems. KP0757 available separately.

DATA RANGES

The data contained in this data sheet may be reported as typical value and/or range. Values are based on actual test data and are verified on a regular basis.

NOTES

The information contained herein is produced in good faith and is believed to be reliable but is for guidance only. Chemence Ltd and its agents cannot assume liability or responsibility for results obtained in the use of its product by persons whose methods are outside or beyond our control. It is the user's responsibility to determine the suitability of any of the products and methods of use or preparation prior to use mentioned in our literature and furthermore the user's responsibility to observe and adapt such precautions as may be advisable for the protection of personnel and property in the handling and use of any of our products.

Chemence Ltd, Princewood Road, Corby, Northants NN17 4XD UK
T: +44 (0)1536 402600 F: +44 (0)1536 406266
E: Krylex@chemence.com W: www.chemence.com/krylex