

Advanced Materials

Araldite® Kit K 75-2 Standard CI

Structural Adhesives

Proven impact-resistant Crusher Backing Epoxy System

- Key properties**
- Kit form allows easy on site mixing.
 - Coloured hardener ensures visual control of mixing.
 - Flows easily
 - Formulations to suit most site conditions
 - Meets Green Building Council of Australia VOC specification on Office Design V2 and V3 IEQ-13 and Interiors V1.1 IEQ-11 (refer to attachment below)

Description Araldite® Kit K 75-2 Standard CI is a two-part, epoxy system specially formulated for backing of wearing lining plates in crushers. Once cured, Araldite Kit K 75-2 Standard CI features high compressive strength and good environmental stability.

Product data

	Component A (resin)	Component B (hardener)	K 75-2 Std (mixed)
Colour (visual)	Beige	Red	Red flowable liquid
Specific gravity	1.65 – 1.75	1.00 – 1.05	ca 1.6
Viscosity at 25°C (Pas)	17-20000	300 – 340	9000 - 9600
Pot life, 100 cm ³ mix, 10°C	-	-	90 -110 minutes
Pot life, 100 cm ³ mix, 25°C			20 – 25 minutes
Pot life, 100 cm ³ mix, 35°C			10 – 15 minutes
Shelf life (2 - 40°C)			
Flash point (°C)			

Processing

Pretreatment

The strength and durability of a bonded joint are dependent on proper treatment of the surfaces to be bonded.

At the very least, joint surfaces should be cleaned with a good degreasing agent such as acetone, iso-propanol (for plastics) or other proprietary degreasing agents in order to remove all traces of oil, grease and dirt.

Low grade alcohol, gasoline (petrol) or paint thinners should never be used.

The strongest and most durable joints are obtained by either mechanically abrading or chemically etching ("pickling") the degreased surfaces. Abrading should be followed by a second degreasing treatment

Mix ratio	Parts by weight	Parts by volume
Component A (resin)	100	100
Component B (hardener)	7	12

Araldite® Kit K 75-2 Standard CI is available in a 10 kg kit. The hardener can simply be added into the resin container, mixed and poured directly into the crusher.

Application the lining backing material

- Seal all crevices with putty, plasticine or some other material, so that backing mixture does not leak out.
- Using a low speed electric drill, stir the resin, then add the hardener slowly with continuous mixing.
- Mix until uniform colour is obtained, but do not aerate the mixture.
- The mixture must be used as soon as possible after mixing.
- At higher ambient temperatures use Araldite® Kit K75-2 Slow
- At lower ambient temperatures (typically below 20°C) use Araldite® Kit K75-2 Standard .

Equipment maintenance

All tools should be cleaned with hot water and soap before adhesive residues have had time to cure. The removal of cured residues is a difficult and time-consuming operation.

If solvents such as acetone are used for cleaning, operatives should take the appropriate precautions and, in addition, avoid skin and eye contact and avoid breathing vapours.

Lap shear strength development versus Temperature

Temperature	°C	10	25	35
Minimum cure time	Hours	22	6	2.5
80% of ultimate strength	Minutes	-	-	-
Full cure time	Hours	28	24	4
	Minutes	-	-	-

Typical cured properties

Unless otherwise stated, the figures given below were all determined by testing standard specimens cured at 40°C for 16 hours. They are provided solely as technical information and do not constitute a product specification.

Parameter	Units	Standard	Result
Tensile Strength	MPa	ISO 527	28 - 34
Modulus in tension	MPa	ISO 527	6800 - 6900
Elongation at Break	%	ISO 527	0.5
Compressive Strength	MPa	ISO 604	95-105
Modulus in Compression	MPa	ISO 604	2520 - 2560
Flexural Strength	MPa	ISO 178	52-58
Modulus in Flexure	MPa	ISO 178	7500 - 7700
Tensile Shear Strength (Al / Al)	MPa	ISO 4587	15
Tensile Shear Strength (steel / steel)	MPa	ISO 4587	16
Shore D Hardness			90
Tg	°C	DSC	58
Moisture Absorption (20 °C/10 days)	% by weight	ISO 62	0.08

Peak Exotherm

Measured on a 700 g mix

140°C

Storage

Araldite® Kit K 75-2 Standard CI may be stored for up to 2 years at 5 – 35 °C provided the components are stored in sealed containers. The expiry date is indicated on the label.

Handling precautions**Caution**

Our products are generally quite harmless to handle provided that certain precautions normally taken when handling chemicals are observed. The uncured materials must not, for instance, be allowed to come into contact with foodstuffs or food utensils, and measures should be taken to prevent the uncured materials from coming in contact with the skin, since people with particularly sensitive skin may be affected. The wearing of impervious rubber or plastic gloves will normally be necessary; likewise the use of eye protection. The skin should be thoroughly cleansed at the end of each working period by washing with soap and warm water. The use of solvents is to be avoided. Disposable paper - not cloth towels - should be used to dry the skin. Adequate ventilation of the working area is recommended. These precautions are described in greater detail in the Material Safety Data sheets for the individual products and should be referred to for fuller information.



VOC Content Test Certificate

Thursday July 23rd, 2009

Supplier: Huntsman Advanced Materials (Australia) Pty Ltd (Gate 3, Ballarat Road, Deer Park Victoria 3023)

Sample Description: Araldite® Kit K75-2 Standard CI epoxy adhesive for construction use.

Date Tested: July 2009 (Tested by FORAY Laboratories – NATA Accreditation 1231)

Test Method: SCAQMD Method 304-91 Determination of Volatile Organic Compounds (VOC) in Various Materials as referenced by South Coast Air Quality Management Division (SCAQMD) Rule 1168.

Test Data:

<p>Specification</p> <p>Green Building Council of Australia Green Star Office Design V2 IEQ-13 Green Star Office Interiors V1.1 IEQ-11</p>	<p>Araldite® Kit K75-2 Standard CI</p>
<p>Multipurpose Construction Adhesive 70 grams per Litre as VOC content material</p>	<p>8 grams per Litre as VOC content material</p>
<p>Specification</p> <p>Green Building Council of Australia Green Star Office Design V3 IEQ-13</p>	<p>Araldite® Kit K75-2 Standard CI</p>
<p>Multipurpose Construction Adhesive 70 grams per Litre as VOC content material</p>	<p>8 grams per Litre as VOC content material</p>

Dr. Vyt Garnys
 PhD, BSc(Hons) AIMM, ARACI, ISIAQ
 ACA, AIRAH, FMA
 Managing Director and Principal Consultant

F0907-05

Legal Notice

Huntsman Advanced Materials warrants only that its products meet the specifications agreed with the buyer. Typical properties, where stated, are to be considered as representative of current production and should not be treated as specifications.

The manufacture of materials is the subject of granted patents and patent applications; freedom to operate patented processes is not implied by this publication.

While all the information and recommendations in this publication are, to the best of our knowledge, information and belief, accurate at the date of publication, NOTHING HEREIN IS TO BE CONSTRUED AS A REPRESENTATION, WARRANTY OR CONDITION OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NONINFRINGEMENT OF ANY INTELLECTUAL PROPERTY RIGHT OF ANY THIRD PARTY.

IN ALL CASES, IT IS THE RESPONSIBILITY OF THE USER TO DETERMINE THE APPLICABILITY OF SUCH INFORMATION AND RECOMMENDATIONS AND THE SUITABILITY OF ANY PRODUCT FOR ITS OWN PARTICULAR PURPOSE.

The behaviour of the products referred to in this publication in manufacturing processes and their suitability in any given end-use environment are dependent upon various conditions such as chemical compatibility, temperature, and other variables, which are not known to Huntsman Advanced Materials. It is the responsibility of the user to evaluate the manufacturing circumstances and the final product under actual end-use requirements and to adequately advise and warn purchasers and users thereof.

Products may be toxic and require special precautions in handling. The user should obtain Safety Data Sheets from Huntsman Advanced Materials containing detailed information on toxicity, together with proper shipping, handling and storage procedures, and should comply with all applicable safety and environmental standards.

Hazards, toxicity and behaviour of the products may differ when used with other materials and are dependent on manufacturing circumstances or other processes. Such hazards, toxicity and behaviour should be determined by the user and made known to handlers, processors and end users.

Except where explicitly agreed in writing otherwise, the sale of product referred to in this publication is subject to the terms and conditions of sale of the Huntsman company from which you purchased the product (or those of the authorised distributor, as the case may be).

Huntsman Advanced Materials is an international business unit of Huntsman Corporation. Huntsman Advanced Materials trades through Huntsman affiliated companies in different countries including but not limited to Huntsman Advanced Materials LLC in the USA; Huntsman Advanced Materials (Europe) BVBA in Europe; and Huntsman Advanced Materials (Australia) Pty Ltd, Huntsman Advanced Materials (Hong Kong) Ltd, Huntsman Advanced Materials (Guangdong) Company Limited, Huntsman Advanced Materials (India) Pvt Ltd, Huntsman Japan KK, Huntsman Advanced Materials (Singapore) Pte Ltd and Huntsman Advanced Materials (Taiwan) Corporation in Asia Pacific.

Araldite is a registered trademark of Huntsman Corporation or an affiliate thereof.

Copyright © 2009 Huntsman Corporation or an affiliate thereof. All rights reserved.

Huntsman Advanced Materials
(Guangdong) Company Limited
Flying Geese Mountain Industrial
Park Shilou Town,
Panyu District, Guangzhou 511447
P.R.China
Tel.: +86-20 3937 7000
Fax: +86-20 8486 5122
www.huntsmanadmat.cn
Email:
advanced_materials@huntsman.com