



## DURAPAVE EQUI-SAFE

### EPOXY RESIN BASED RUBBERISED EQUINE ANTI-SLIP SAFETY SYSTEM

Durapave Equi-Safe is a specially formulated two-part epoxy resin system, developed for application to hard surfaces (including asphalt and concrete) in combination with rubber chippings to form a hard-wearing, high performance, cushioned noise reduction and anti-slip surface. The resultant surfaces are highly resistant to wear and weathering and should maintain an anti-slip, cushioned, horse friendly surface for long periods of time.

#### BENEFITS:

- Convenient mix ratio 1:1 by weight
- Excellent physical properties
- Resistant to chemicals, urine and faecal matter
- Non-toxic system

#### APPLICATIONS

- Crossings
- Stables
- Walkways
- Bridleways
- Paddocks
- Horse/vehicle interfaces



#### NOTES:

New asphalt should be left for a minimum of four weeks, depending upon vehicle traffic. This is necessary to allow any volatile oils in the asphalt to oxidise. Durapave may be applied to concrete surfaces, a suitable primer may be required.

Table 1

PART A PHYSICAL PROPERTIES				
	Units	Method <sup>(2)</sup>	Minimum	Maximum
Appearance - [ To Defined Standard ] <sup>(2)</sup>	-	RSMT A 1001-001	ETS <sup>(3)</sup>	-
Colour	-	RSMT A 1002-001	BUFF/ CLEAR	
Viscosity	Poise	RSMT A 1003-005	35.00	55.00
Gel Time	Minutes	RSMT A 1021-001	15.00	25.00
Specific Gravity - [ Weigh Cup ]	Kilograms/ litre	RSMT A 1010-002	1.10	1.20

**PHYSICAL CHARACTERISTICS:**

Durapave Equi-Safe PART “A” polymer specification and supplementary physical and handling properties. Table 1 provides details of some of the product characteristics. The values highlighted by the circular symbols [ left hand column of table ] are properties tested on a batch basis and reported in the certificate of analysis. All other properties are typical of batch manufacture and are for technical information only. They do not constitute a specification.

**PROPERTY KEY:**

- (1) RSMT - Roadtechs Standard Method of Test
- (2) FFFM - Free from Foreign Matter
- (3) ETS - Equal to Standard
- (4) Evaluated at 25°C/77F

**Figure 1**  
viscosity vs temperature

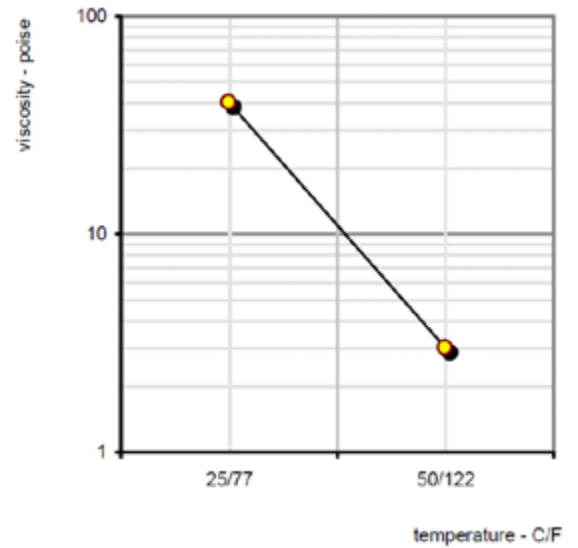


Table 2

PART B PHYSICAL PROPERTIES				
	Units	Method <sup>(2)</sup>	Minimum	Maximum
Appearance - [ To Defined Standard ] <sup>(2)</sup>	-	RSMT A 1001-001	ETS <sup>(3)</sup>	-
Colour	-	RSMT A 1002-001	CLEAR	
Viscosity @ 25°C <sup>(4)</sup>	Poise	RSMT A 1003-005	35.00	70.00
Gel Time	Minutes	RSMT A 1021-001	15.00	25.00
Specific Gravity - [ Weigh Cup ] <sup>(4)</sup>	Kilograms/ litre	RSMT A 1010-002	0.95	1.20

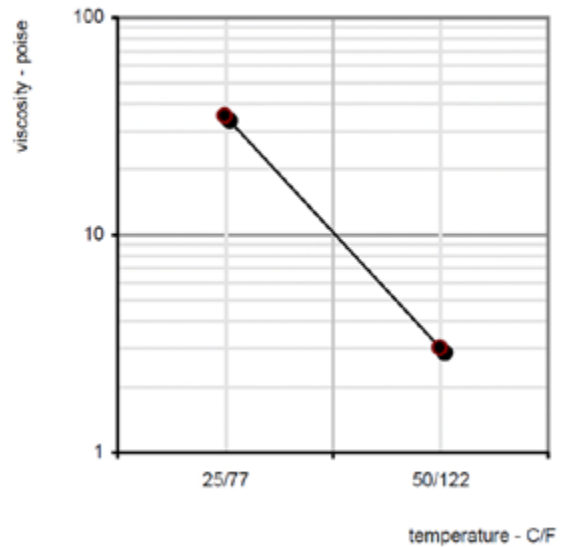
**PHYSICAL CHARACTERISTICS:**

Durapave Equi-Safe PART “B” polymer specification and supplementary physical and handling properties. Table 1 provides details of some of the product characteristics. The values highlighted by the circular symbols [ left hand column of table ] are properties tested on a batch basis and reported in the certificate of analysis. All other properties are typical of batch manufacture and are for technical information only. They do not constitute a specification.

**PROPERTY KEY:**

- (1) RSMT - Roadtechs Standard Method of Test
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Figure 2  
viscosity vs temperature



**PROCESSING:**

Durapave Equi-Safe system has been developed for application via machine or hand mixing operations whereby the correct ratio of components are combined and thoroughly dispersed before being applied to the substrate. Appropriate measures should be taken to ensure accurate mix weights and adequate combination (mixing) of materials. With these application techniques additional care is required with potential exotherm and health and safety control. Materials should be intimately mixed in the designated ratio and applied evenly to the substrate. Coverage details will vary with the porosity of the substrate and typical application weight details are provided further on.

**PROCESSING - REACTIVITY:**

Table 3

COMPONENT	QUANTITY (BY WEIGHT)
DURAPAVE EQUI-SAFE PART "A" [ formulated epoxy resin component ]	100
DURAPAVE EQUI-SAFE PART "B" [ formulated epoxy resin component ]	100

**NOTE:**

Variations of +/- have been found to provide product with acceptable performance although as with all materials we advocate full evaluation of the material for specific bonding applications. We will be pleased to take samples of materials and provide bond evaluation and test report.

The resin and hardener [ Parts A and B respectively ] have been formulated with additives to enhance cure. The system has been formulated to have high reactivity at ambient temperatures. The gel-time reactivity is affected by several factors with mass and temperature being the most influential. Increasing temperature will reduce gelation times and enable shorter production cycles, this being at the expense of pot-life (working time).

Figure 4 provides typical gel-times for the mixed system at various temperatures For QA purposes reactivity is tested at 25°C in a 150Gm mass.

**PROCESSING - APPLICATION:**

Table 4

TEMPERATURE	TIME
5°C	10 hours
25°C	2 hours
50°C	30 mins

The system must be applied to dry substrates, free from oil solvents and loose debris/stone. As stated previously the application rate will vary with substrate porosity. The following coverage levels are suggested.

Durapave Equi-Safe system is generally applied at a nominal 20 - 30°C mixed temperature (hand mix application) and following intimate mixing is spread evenly to provide the aforementioned coverage. Following application to the substrate, the rubber chippings are distributed across the surface before the binder has set. The system is allowed to cure and the residual rubber can be left in situ or is then brushed from the surface and reclaimed.

Table 5

COMPONENT	KG/M <sup>2</sup>
DURAPAVE EQUI-SAFE SYSTEM [ mixed components ]	1.4 - 2.2
RUBBER CHIPPINGS [ graded ]	6 - 10

**MECHANICAL PROPERTIES:**

Durapave Equi-Safe has been formulated to provide long term resilient binding of the designated Rubber. Tensile strength and elongation characteristics of the product are evaluated on a batch basis and are typically as detailed below.

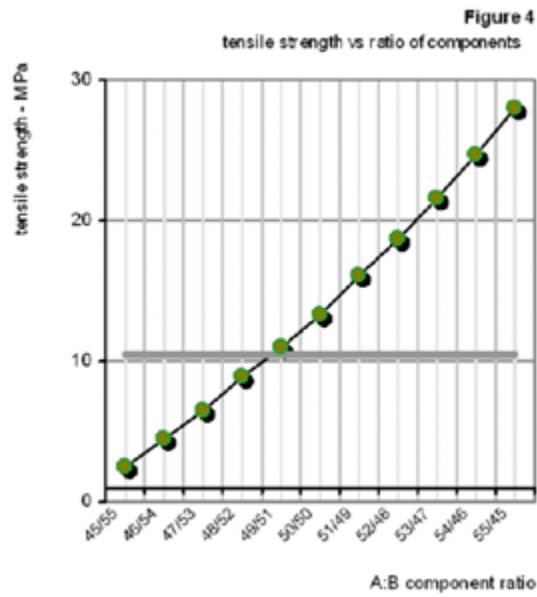
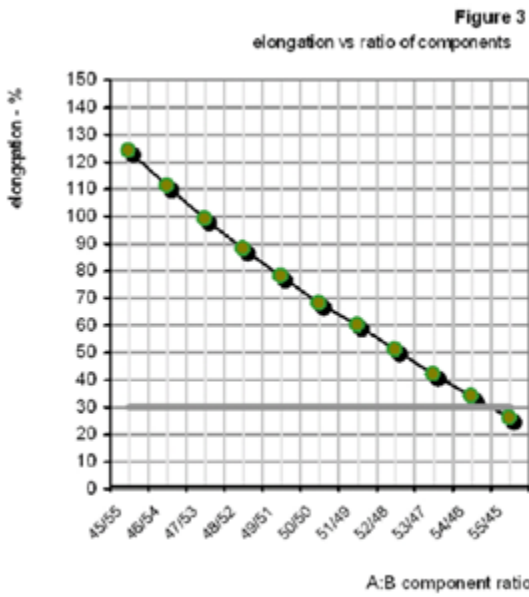
Table 6

PROPERTY	RESULT
Size Range	1 - 3mm
Grading - Sieve retention [ 3.55mm BS sieve ]	< 5%
Grading - Sieve retention [ 1.88mm BS sieve ]	< 95%

Effect of tensile/elongation figures with mix ratio deviation is detailed below.

Table 7

PROPERTY	RESULT
Tensile strength	> 10.5mpa
Elongation	> 30%



**IMPORTANT NOTES:**

Storage and handling: Packed in 1000kgs IBC containers + 20kg tins, Shelf life in excess of 12 months if unopened and stored in a dry environment, Protect from sub-zero temperatures.

**Disclaimer:** All products should be used in accordance with the manufacturer's instructions. No responsibility can be taken by the manufacturer where conditions of use are beyond our control. Materials are sold only on the basis of conforming to specification, but without warranty expressed or implied in law or in fact of merchantability or fitness for a particular purpose and upon the condition that purchasers make their own tests to determine the suitability of such products for their particular purpose. Issue no: 5 – 20.4.21

**Speak to our experts, contact us today**

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