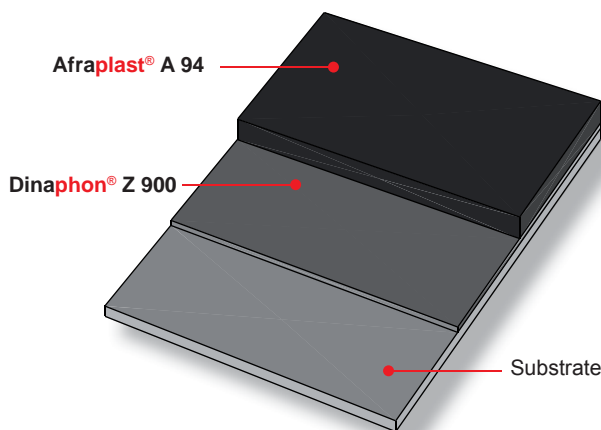


### Cross Section



### Applications

**Afraplast® A 94** is ideal for the soundproofing of motor vehicles, in particular railroad cars. It is also suitable for damping of motor vehicle bodies, air circulation blowers and all types of metal constructions as well as soundproofing of corrugated sheet metal, façade elements, ductwork, etc.

### Attributes

**Afraplast® A 94** deadens vibrations and vibrational resonance of sheet metal cladding of control cabins, vehicle bodies and other sheet metal constructions. Based on the Oberst 2 calculation method, a 1- mm thick sheet of metal coated with 2 mm (double the sheet metal thickness) application of **Afraplast® A 94** has a damping factor ( $\eta$ ) of .10 - .11 at 20° C and 200 Hz frequency.

Evaporation of the water in the compound sinters the bitumen, producing a thermoplastic coating that adheres superbly to substrates provided they have been properly prepared prior to coating. The coating is extremely durable and offers superior protection against water, weather, stone chipping and other mechanical forces.

Avoid contact with organic solvents, petroleum and mineral oil, as they will dissolve the compound. At 20° C, **Afraplast® A 94** absorbs 7 - 10 % of its weight in water when immersed for a prolonged period.

### Use

Before applying **Afraplast® A 94**, metal surfaces must always be properly primed. Zinc dust or zinc phosphate primers (approx. dry coat thickness of 40 - 60  $\mu\text{m}$ ) are suitable for priming both steel sheet metal and iron constructions. Use an epoxy primer to prime aluminium and galvanised surfaces, making sure the dry coat thickness is no less than 40  $\mu\text{m}$ . Before applying **Afraplast® A 94**, allow a mandatory minimum of 24 hours at 20° C to dry. Spray **Afraplast® A 94** on to properly primed surfaces (refer to above) via pressure tank or drum pump (e.g. ratio = 5:1). A spray gun with 6 mm, round nozzle, tank pressure of approx. 4 - 7 bar and spray gun pressure of 2.5 - 3 bar are necessary for proper application. The compressor should have a minimum capacity of 35  $\text{m}^3/\text{h}$ . Smaller areas can be covered with a trowel or, once thinned with water (approx. 2%), with a brush.

As a rule, it is best to apply **Afraplast® A 94** with a coat thickness that is two times the thickness of the sheet metal. Because a loss in volume of approx. 30% can be expected, the wet coat thickness should not exceed 5 mm (corresponds to 4 mm when dry) to avoid cracking. If a thicker coat is required, wait until the first coat has dried, and then apply a second time.

### Technical Data

<b>Product Data</b>	<b>Afraplast® A94</b>
<b>Adhesion to primed sheet metal</b>	0.31 N/mm <sup>2</sup>
<b>Specific weight:</b>	
At purchase	1.147 g/cm <sup>3</sup>
Dry	1.255 g/cm <sup>3</sup>
<b>Solids content</b>	64 %
<b>Contraction with drying</b>	30 % of volume
<b>Coverage and drying time:</b>	
Per mm of dry coat without loss	1.649 kg/m <sup>2</sup> *
Water absorption (percent by weight)	3.5 % after 24 h
Drying time (normal conditions) for 4 mm coat	48 h
<b>Rated thermal conductivity <math>\lambda</math> (W/m<sup>2</sup>K)</b> (as per DIN 12524, Issue 2000)	0.170
<b>Fire ratings as per DIN 5510 Section 2:</b>	
Flammability	S4
Smoke	SR2
Drip	ST2
<b>Building material rating as per DIN 4102</b>	B2
<b>Fire rating LNE (AFNOR)</b>	M1
<b>Classification according to DIN EN 45545</b>	
Requirement tabe: R1 / R7 / R17	HL 2
<b>Heat resistance:</b>	
At 120 °C	3 days
At 170 °C	3 hours

\* Does not include allowance for overspraying

### Drying

The compound dries as the water contained in the material evaporates. Coat thickness, temperature, relative humidity and air circulation all affect the rate of evaporation.

In a standard conditioning atmosphere, a 4 mm coat of **Afraplast® A 94** dries in 48 hours.

### Packaging Unit and Form

High viscosity liquid for spray application

**Colour:** dark grey

**Standard packaging units:**

18 kg tub

200 kg drum

### Shelf Life

12 months if stored in a properly sealed original container and not exposed to freezing temperatures. Should liquid appear on the surface following longer periods of disuse, stir the compound thoroughly until well homogenised before using.

### Technical Information

**Cleaning of tools, equipment and hands:**

**Afraplast® A 94** removes easily with water if wet.

If dry, xylene or benzine is a suitable cleansing agent.

**Physiological effects:**

None.

**Flammability:**

Non-flammable if wet.

**Safety information:**

Not classified as toxic. Not available for retail sale to public.

BAG T No. 619000 (Swiss code). VVS 1610. RID/ADR non-hazardous European rating.

Solvent content: 0%

**Protected by Swiss patent number 685880, International patent is pending**

*Keller Lärmschutz AG provides its assistance, application-specific advice and product use instructions to the best of its knowledge and ability. Keller Lärmschutz AG reserves the right to make the changes to its products and information, which are the result of its constant efforts to improve both the information and products, and shall not be held liable for damages occurring due to the information or assistance it provides. Moreover, the information provided by Keller Lärmschutz AG shall not nullify the responsibility of the purchaser of the products to test the suitability of the materials for the intended application, process and purpose prior to using them.*