

PRODUCT INFORMATION

ADHESIVE SOLUTION SH-3E [NR]

Areas of Use

ADHESIVE SOLUTION SH-3E is an adhesive solution based on natural rubber polymer, which is to be exclusively used for the bonding of our unvulcanised hard rubber materials CHEMONIT 18, CHEMONIT 3 B, CHEMONIT 30, CHEMONIT 31, CHEMONIT 31 HW, CHEMONIT 33, CHEMONIT 34, CHEMONIT 34 HW, CHEMONIT 35 as well as CHEMONIT 181 on to steel surface.

The **ADHESIVE SOLUTION SH-3E** is especially designed to allow the transport in reefer containers at a temperature of 5°C to 10 °C which is required for the shipment of the different hard rubber grades.

When vulcanising in steam or with hot water or when used with our special hard rubber grades CHEMONIT 18, CHEMONIT 34, CHEMONIT 34 HW or CHEMONIT 35 and for special applications the metal primers PRIMER HG 1 and PRIMER HG 2 must be applied additionally. An excellent bond to steel is achieved by the vulcanisation under pressure with either Hot Air, Steam Injection or by Hot Water. The necessary vulcanisation temperatures and vulcanisation times are to be followed in the application instructions for the respective grades.

Product Description

Polymer Basis:	Natural Rubber (NR)
Solvent:	Special benzine 140/165 (inflammable)
Colour:	pink / beige
Danger Category:	VbF A II

Product Advantages

- no addition of hardener, therefore longer Pot Life
- longer adhesion time (contact bonding time)
- good painting properties
- high productivity
- high separation strength
- good thermal stability (max. 100 °C)

Shelf Life

6 months – when stored in the unopened original drums under the storage conditions according to DIN 7716

Application of the ADHESIVE SOLUTION SH-3E and bonding agents PRIMER HG 1 and PRIMER HG 2

Following the cleaning of the shot blasted steel surfaces (according to SA 2 ½ blasting standard) the inspection of the shot blasting is made, whereby the depth of roughness and the surface cleanliness are to be checked and recorded.

ADHESIVE SOLUTION SH-3E, PRIMER HG 1 and PRIMER HG 2 have to be well stirred before use.

Directly after the cleaning and inspection is completed, the primer is to be completely and evenly applied on the shot blasted and dust-free cleaned substrate.

Alternative 1) Priming with ADHESIVE SOLUTION SH-3E.

Priming and Bonding System	
Type	ADHESIVE SOLUTION SH-3E
No. of coats	2
Application Method	Painting
Drying Time per coat *)	Drying time - substrate 1 st coat: min. 3 h / max. 14 d 2 nd coat: min. 6 h / max 7 d
Material Usage	0.15 kg/m ² per coat

Alternative 2) Priming with PRIMER HG 1 / PRIMER HG 2 and application of ADHESIVE SOLUTION SH-3E

When vulcanisation is carried out with steam or hot water, all afore mentioned rubber lining materials must be bonded using the double-layer priming system PRIMER HG 1 and PRIMER HG 2 in combination with **ADHESIVE SOLUTION SH-3E** onto steel. This "alternative 2" system must always be used when the special materials CHEMONIT 18, CHEMONIT 34, CHEMONIT 34 HW or CHEMONIT 35 are applied.

Priming of the steel substrate		
	1 st Coat	2 nd Coat
Type	PRIMER HG 1	PRIMER HG 2
Colour	Grey	black
Application Method	Painting	Painting
No. of Coats	1	1
Drying Time per coat *)	min. 1 hour / max. 14 d	min. 1 hour / max. 7 d
Material Usage	0.150 kg/m ²	0.150 kg/m ²

Bonding System	
Type	ADHESIVE SOLUTION SH-3E
Application Method	Painting
No. of Coats	2 onto the substrate 1 onto the rubber sheet
Drying Time per coat *)	Drying time - substrate 1 st coat: min. 3 h / max. 14 d 2 nd coat: min. 6 h / max. 7 d Drying time - rubber sheet 1 st coat: 20 min / to 1 h
Material Usage	SH-3E 0.20 - 0.25 kg/m ² per coat

*) The contact-adhesion times are dependent naturally on the climatic and environmental influences such as ambient temperatures, relative humidity, ventilation etc. The given times are therefore to be taken as general guidelines, whereby the ideal times required have to be established under consideration of the individual climatic conditions.

Application Parameters for the Solution

Application Temperature Range:	+ 10 °C to + 35 °C
Maximum Relative Humidity 1 st coat:	50 %
Maximum Relative Humidity further coats:	80 %

Available Packing Units

Product Designation	Drum Size	Product-No.
ADHESIVE SOLUTION SH-3E	8 kg	538 1513

This data sheet is for informational purposes only. All data provided herein is based on in-depth research and testing, however no liability whatsoever can be assumed. Since we are constantly endeavouring to up-date and improve our products, we recommend noting the index and issue date indicated on this data sheet and to inquire as to whether any properties have changed in the interim. This Product Information Sheet replaces all prior issues. Please contact our Technical Consultant for detailed information in case of ambiguities.

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