

WACKER® ANCHORAGE ADDITIVE HF 100

Anchorage Additives

WACKER® ANCHORAGE ADDITIVE HF 100 is a reactive epoxyfunctional silicone polymer which, when mixed with addition-crosslinking DEHESIVE® systems or liquid silicone rubbers (LSR) increases their adhesion to polymeric substrates.

Properties

- improves anchorage of DEHESIVE® systems on PET films for producing release liners
- improves anchorage of LSR on fabric
- low odour
- low corrosiveness

Specific features

- Additive
- Solvent-free

Technical data

General Characteristics

Property	Condition	Value	Method
Appearance	-	clear low viscous liquid	-
Density	20 °C	1.059 g/cm ³	DIN 51757
Flash point	-	44 °C	ISO 13736
Ignition temperature	-	275 °C	EN 14522
Odor	-	aromatic	-
Viscosity, kinematic	20 °C	approx. 35 mm ² /s	-

These figures are only intended as a guide and should not be used in preparing specifications.

All the information provided is in accordance with the present state of our knowledge. Nonetheless, we disclaim any warranty or liability whatsoever and reserve the right, at any time, to effect technical alterations. The information provided, as well as the product's fitness for an intended application, should be checked by the buyer in preliminary trials. Contractual terms and conditions always take precedence. This disclaimer of warranty and liability also applies particularly in foreign countries with respect to third parties' rights.

Store in a dry and cool place.

Protect against moisture.

Applications

- Release Coatings

Application details

WACKER® ANCHORAGE ADDITIVE HF 100 may be used with good success in combination with solvent-free and solvent-based DEHESIVE® systems for siliconising unprimed polyester film grades. WACKER® ANCHORAGE ADDITIVE HF 100 improves long term silicone anchorage. In case of very demanding anchorage conditions it can be helpful to combine the use of WACKER® ANCHORAGE ADDITIVE HF 100 with a corona treatment of the substrate.

In cases where anchorage on paper substrates like on claycoated paper is difficult to achieve, WACKER® ANCHORAGE ADDITIVE HF 100 may be helpful. The adhesion of liquid silicone rubber Elastosil® LR to substrates like PET or polyamide fabric also can be improved by using WACKER® ANCHORAGE ADDITIVE HF 100. WACKER® ANCHORAGE ADDITIVE HF 100 is not soluble in water and therefore cannot be used in waterbased silicones. For waterborne silicone systems Adhesion Promoter HF 86 would be the additive of choice.

Processing

Solvent-free silicones:

Normally WACKER® ANCHORAGE ADDITIVE HF 100 is added to DEHESIVE® formulations as the last component. The recommended standard level of addition in the products mentioned above is in the range of 1-3%. The presence of SiH-functionality in WACKER® ANCHORAGE ADDITIVE HF 100 will result in a higher release level with acrylic adhesives when formulated without compensation of the increased SiH-concentration.

With solvent-free DEHESIVE® systems and with CRA® modifiers, turbidity is observed in the resulting formulation, but this does not have any detrimental effect on the effectiveness of WACKER® ANCHORAGE ADDITIVE HF 100. However, reactivity can be reduced to a certain extent, and the dwell time in the curing oven should be adjusted, depending on the amount of WACKER® ANCHORAGE ADDITIVE HF 100 used.

Solvent-based silicones:

Combined with solvent-based, addition-crosslinking silicones WACKER® ANCHORAGE ADDITIVE HF 100 improves the adhesion of silicone coatings to polyester films, when other methods, such as corona treatment have not yet produced satisfactory results.

The standard concentration in these systems is

0.1 wt % relative to the ready-to-use formulation including solvent (silicone content normally 5 wt %).

Detailed recommendations regarding appropriate formulations can be received from the local WACKER representative.

Packaging and storage

Storage

The 'Best use before end' date of each batch is shown on the product label. Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons. During shipment and storage a small amount of hydrogen may be formed, which normally is released via the safety valve in the lid of the drum or container. Small samples are normally sent in a 500 gram plastic bottle, which should be opened carefully after arrival. In case of a slight pressure build up this can be seen from some bulging of the bottle. During further storage it is recommended to keep the lid not tightly closed to allow for the formed hydrogen to escape. 'Best use before end' date During this period of time the loss of reactive silicone hydride has no effect on the reactivity and the anchorage of WACKER® ANCHORAGE ADDITIVE HF 100.

Safety notes

Atmospheric moisture may cause the formation of small amounts of hydrogen. Therefore opened containers and ready to use formulations never should be kept tightly sealed. The undiluted WACKER® ANCHORAGE ADDITIVE HF 100 should not get into contact with acids and bases (e.g. amines) aluminum, titanium, zirconium, tin, or lead catalysts. Comprehensive instructions are given in the corresponding Material Safety Data Sheets. They are available on request from WACKER subsidiaries or may be printed via WACKER web site <http://www.wacker.com>.

QR Code WACKER® ANCHORAGE ADDITIVE HF 100



For technical, quality or product safety questions, please contact:

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