

SikaCure® -4902, -4902 BE, -4902 BL

Curing agents for water-based dispersion adhesives

Technical Product Data (typical values):

Chemical base	Polyisocyanate	
Color	-4902 -4902 BE -4902 BL	Colorless Blue Black
Solid content (CQP002-1)	80% approx.	
Density (CQP 006-3)	1.2 kg/l approx.	
Viscosity (Brookfield RVT, Sp. 2/10 Rpm)	500 mPa-s approx.	
Mix ratio adhesive (SikaTherm® or SikaSense®) : curing agent	100:4 to 100:5 (parts per weight)	
Pot life	8hrs. approx., (see Product Data Sheet of the adhesive)	
Handling	Shake before using	
Shelf life	6 months in unopened original container at the storage temperature of 5 - 25 °C. Storing for brief periods at up to 30 °C are allowed. SikaCure® is sensitive to frost, store above +5 °C. In winter, only transport in a thermocontainer.	

Description

SikaCure® -4902, -4902 BE, and -4902 BL are approved curing agents for waterborne dispersion adhesives. For good visual control of the mixing process, SikaCure® -4902 BE is blue, and -4902 BL is black. SikaCure® -4902, -4902 BE, and -4902 BL increase both the cohesive strength of the adhesive film and its adhesion to the substrate. Simultaneously, there is a significant improvement in cycling exposures (resistance against temperature and humidity).

Product Benefits

- Easy to mix in
- Increased temperature resistance
- Increased hydrolytic stability
- Increased resistance in cycling exposure
- Higher adhesive strength
- Improved adhesion to substrates which are difficult to adhere to

Areas of Application

SikaCure® -4902, -4902 BE, and -4902 BL are used as curing agent for SikaSense® and SikaTherm® water-based dispersion laminating adhesives processed according to hot sealing or contact bonding procedures.

PRIOR TO USE READ CURRENT PRODUCT DATA SHEET AND MATERIAL SAFETY DATA SHEET FOR THIS PRODUCT AND FOR THE WATER-BASED DISPERSION LAMINATING ADHESIVE, AVAILABLE AT www.sikaindustry.com, OR CONTACT THE TECHNICAL SERVICE DEPARTMENT OF SIKA INDUSTRY AT 888-832-7452.

Industry



Coverage

When mixed with SikaSense® or SikaTherm® water-based dispersion adhesives, typical coating weights can range from 0.26 - 0.65 oz/ft² (80-200 g/m²) wet application per side depending on the substrates being bonded. Non-porous substrates generally require less coating weight for adequate adhesive film formation while porous substrates usually require heavier coating weights.

Cure Mechanism

When SikaCure® is mixed with SikaSense® or SikaTherm®, cure begins by evaporation of water and is followed by chemical cross-linking. At room temperature the chemical curing is completed in about 72 hours. Higher temperatures increase and lower temperatures decrease the speed of both the drying and chemical cross linking.

Chemical Resistance

SikaCure®-4902, -4902 BE, and -4902 BL are resistant to water and some plasticizers. Advice on specific applications will be given on request. For further information contact the Technical Service Department of Sika Industry at 888-832-7452.

Method of Application

Mixing

This product must be used in conjunction with SikaSense® or SikaTherm® water-based dispersion adhesives. The mix ratio of SikaCure® in combination with SikaSense® or SikaTherm® (resin dispersion) is 4 parts weight curing agent to 100 parts by weight resin dispersion. Slightly increasing the curing agent level to 5 parts weight per 100 parts weight resin dispersion results in improved hydrolytic and heat stability.

The curing agent is metered into the continuously stirred dispersion and then mixed with a mechanical mixer to obtain a homogeneous mixture. Care must be taken to avoid air inclusion. The pot life is 8 hours at room temperature. For further information contact the Technical Service Department of Sika Industry at 888-832-7452.

This product is suitable for experienced professional users only. Tests with actual substrates and conditions have to be performed to ensure adhesion and material compatibility.

Limitations

SikaCure® is sensitive to frost, store above +5°C. In winter, only transport in a thermocontainer.

WARNING: IRRITANT, SENSITIZER

Contains Aliphatic Polyisocyanate Polymer (CAS: 28182-81-2), Hexamethylene Diisocyanate (CAS: 822-06-0), Propylene Carbonate (CAS: 108-32-7). May cause skin/eye/respiratory irritation. May cause skin sensitization after prolonged or repeated contact. Harmful if swallowed. **Intentional misuse by deliberate concentration and inhalation of vapors may be harmful or fatal.**

HMIS

Health	3
Flammability	1
Reactivity	0
Personal Protection	C

First Aid

FIRST AID: Eyes – Hold eyelids apart and flush thoroughly with water for 15 minutes. **Skin** – Remove contaminated clothing. Wash skin thoroughly for 15 minutes with soap and water. **Inhalation** – Remove to fresh air. **Ingestion** – Do not induce vomiting. Dilute with water. Contact physician. **In all cases contact a physician immediately if symptoms persist.**

Health and Safety Information

For further information and advice regarding transportation, handling, storage and disposal of chemical products, users should refer to the actual Material Safety Data Sheets containing physical, ecological, toxicological and other safety related data. It is highly recommended to read the actual Material Safety Data Sheet before using the product.

**-KEEP OUT OF REACH OF CHILDREN
-NOT FOR INTERNAL CONSUMPTION
-FOR INDUSTRIAL USE ONLY
-KEEP CONTAINER TIGHTLY CLOSED**

Further Information

Copies of the following publications are available on our website at www.sikaindustry.com:
-Material Safety Data Sheets
-Product Data Sheet

In case of emergency call:
Chemtrec: 800-424-9300
International: 703-527-3887

Packaging Information

4902	0.20 and 1.25 kg Can
4902 BE	0.20 and 1.25 kg Can
4902 BL	0.20 and 1.25 kg Can

Value Basis

All technical data stated on this Product Data Sheet are based on the results of laboratory tests only. Actual measured data in the field may vary due to site specific conditions which are not known to Sika and beyond our control.

Handling and Storage

Avoid direct contact. Wear personal protective equipment (chemical resistant goggles/gloves/clothing) to prevent direct contact with skin and eyes. Use only in well ventilated areas. Open doors and windows during use. Use a properly fitted NIOSH respirator if ventilation is poor. Wash thoroughly with soap and water after use. Remove contaminated clothing and laundry before reuse. Keep from freezing. Store in original container.

Clean Up

Use personal protective equipment (chemical resistant gloves/goggles/clothing). Without direct contact, remove spilled or excess product and place in suitable sealed container. Dispose of excess product and container in accordance with applicable environmental regulations.

Limited Material Warranty

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor. **NO OTHER WARRANTIES IMPLIED OR EXPRESS**

Further information available at:
www.sikaindustry.com

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Sika reserves the right to change the properties of its products without notice. All sales of Sika product(s) are subject to its current terms and conditions of sale which are available at www.sikacorp.com or by calling 201-933-8800.

Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's most current Product Data Sheet, product label and Material Safety Data Sheet which are available at www.sikaindustry.com. Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instruction for each Sika product as set forth in the current Product Data Sheet, product label and Material Safety Data Sheet prior to product use.

Further information available at:
www.sikaindustry.com

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