

SikaForce®-7010

Hardener for two-component polyurethane structural adhesive

Technical Product Data (typical values)

Chemical base	MDI (Diphenylmethane-4,4' diisocyanate)
Color	Brown, Transparent
Density (23°C/73°F)	1.2 g/cm ³
Solids Content	100 %
Viscosity (23°C/73°F)	Brookfield RVT 2/50 250 mPa.s
Shelf life (storage between 10-30°C, or 50-86°F)	9 months

Description

SikaForce®-7010 is the MDI isocyanate hardener component of a two-component polyurethane adhesive. It is designed to react with SikaForce® 7815-9452 to produce a structural adhesive. SikaForce®-7010 is manufactured in accordance with the ISO 9001/14001 quality assurance systems and the Responsible Care Program.

Product Benefits

- Low vapor pressure
- Low viscosity

Areas of Application

When mixed with SikaForce®-7815-9452 polyol at a typical weight or volume ratio of 100:40 polyol:hardener, a high performance structural adhesive is produced which is used for high strength bonding of composites, such as windmill blades (epoxy prepreg).

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

Industry



Cure Mechanism

SikaForce®-7010 is the isocyanate hardener component of a two-component polyurethane system which cures by chemical reaction. Speed of reaction will increase (quicken) with increasing component, substrate and/or ambient temperatures.

Chemical Resistance

In case of chemical exposure potential and possible resulting effects upon adhesive performance, we recommend project testing; consult Sika Technical Service at 888-832-7452.

Method of Application

Surface preparation

It is generally necessary to prepare substrates for bonding to ensure optimal adhesion and strength. The pre-treatment may consist of sanding, degreasing, cleaning, priming etc. Consult Sika Technical Service at 888-832-7452 for guidance on specific application surface preparation and pre-treatment.

Mixing

SikaForce®-7010 hardener is mixed 40 parts with 100 parts SikaForce®-7815-9452 polyol. The ratio can either be by weight or volume as the hardener and polyol are of approximately the same density. The mixed product has an approximate one hour pot life at 77°F (25°C), defined as the time for the mixed product to reach a viscosity of 400Pa.s using the Rheomat method.

Application

A typical mixed two-component adhesive coating weight range is 150-350 grams per square meter. A specific coat weight for a given substrate combination should be determined by testing. Application can be manual or via metering equipment.

Removal

Uncured hardener may be removed from tools and equipment with mineral spirits or another suitable solvent. Strictly follow solvent manufacturer's instructions for use and warnings. Once cured, the material can only be removed mechanically. Hands and exposed skin should be washed immediately using a suitable industrial hand cleaner and water. Do not use solvents on hands!

Limitations

SikaForce®-7010 isocyanate hardener MUST BE PROTECTED FROM FREEZING. Care must be taken during transport to ensure that a temperature of 0°C (32°F) at the very minimum (for a maximum six hours) is maintained. SikaForce®-7010 also must be protected from atmospheric contact, as it will react with atmospheric moisture.

WARNING: IRRITANT, SENSITIZER. Contains Polymeric Diphenylmethane Diisocyanate (CAS: 9016-87-9), 4,4'-Methylenediphenyl Diisocyanate (CAS: 101-68-8), Methylenediphenyl Diisocyanate (CAS: 26447-40-5). Harmful if swallowed. May cause eye/skin/respiratory irritation. May cause sensitization by skin contact.

HMIS

Health	2*
Flammability	1
Reactivity	1
Personal Protection	C

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.**

Further Information

Copies of the following publications are available on our website www.sikaindustry.com or by calling 888-832-7452:

- Material Safety Data Sheets
- Product Data Sheets

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

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**
- **FOR PROFESSIONAL USE ONLY**

Packaging Information

Drum	250 kg
Tote	1000 kg

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

Further information available at:
www.sikaindustry.com

Sika Corporation
Industry Division
30800 Stephenson Highway
Madison Heights, MI 48071
USA
Tel. 248 577 0020
Fax 248 577 0810



during use. Use a properly fitted NIOSH respirator if ventilation is poor. Wash thoroughly with soap and water after use. Remove contaminated clothing and launder before reuse.

Minimum transport temperature is 0°C (32°F) for a maximum six hours. Product storage needs to be between 10 and 30°C (50 and 86°F) in a dry place. Do not expose to direct sunlight or frost. After opening of the packaging, the contents should be protected against atmospheric moisture by mounting a silica gel tube.

Clean Up

In case of spill, ventilate area. Open doors and windows. Wear chemical resistant gloves/goggles/clothing. In absence of proper ventilation use properly fitted NIOSH respirator. Confine spill, collect using absorbent material and place in properly sealed container. Dispose of excess product in accordance with applicable local, state and federal 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 SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO**

INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.

Legal Notes/Disclaimer

All information provided by Sika Corporation ("Sika") concerning Sika products, including but not limited to, any recommendations and advice relating to the application and use of Sika products, is given in good faith based on Sika's current experience and knowledge of its products when properly stored, handled and applied under normal conditions in accordance with Sika's instructions. In practice, the differences in materials, substrates, storage and handling conditions, actual site conditions and other factors outside of Sika's control are such that Sika assumes no liability for the provision of such information, advice, recommendations or instructions related to its products, nor shall any legal relationship be created by or arise from the provision of such information, advice, recommendations or instructions related to its products. The user of the Sika product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with the full application of the product(s).

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

Sika Corporation
Industry Division
30800 Stephenson Highway
Madison Heights, MI 48071
USA
Tel. 248 577 0020
Fax 248 577 0810

