SikaTack[®] Ultrafast US

Fast-Cure OEM Direct Glazing Adhesive, High Strength Elastic Assembly Adhesive

Technical Product Data (typical values) *Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

and equipment, temperature, application methods, test methods, details	nto conditione and can	ng contaitione.
Chemical base		1-C polyurethane
Color		Black
Cure mechanism		Moisture-curing
Density (uncured)		9.8 lbs/gal
Non-Sag Properties		Very good
Cut off string		Very good
Application temperature	product	158°F - 194°F (70°C – 90°C)
Service Temperature		-40° F – 190° F
Tack free time ¹		15 minutes
Open Time		10 minutes
Curing speed		(see diagram 1)
Shrinkage		2%
Shore A-hardness (ASTM D 2240)		65
Tensile strength (ASTM D 412)		1000 psi
Elongation at break (ASTM D 412)		450%
Tear strength (DIN 53515)		40 lbs/in
Tensile lap-shear strength (ASTM D 1002)		600 psi
Volume resistivity (DIN 53482)		3 x 10 ⁹ W cm
Shelf life (storage below 75°F (24°C))		Cartridges – 9 months Drums - 6 months

¹⁾ 73°F (23°C) / 50% r.h.

Description

SikaTack[®] Ultrafast US is a warm applied high-performance elastic gap-filling one-part polyurethane adhesive that cures on exposure to atmospheric moisture to form a durable elastomer.

SikaTack[®] Ultrafast US is manufactured under the strictest quality standards in accordance with the ISO 9001/ 14001 quality assurance system and the Responsible Care Program.

Product Benefits

- One component
- Suitable for automated
- application
- High initial strength
- Short tack free and cure times
- Very short cut-off string
- Excellent stability
- Gap filling properties
- Shock and impact resistant
- Ideal for the OEM market

Areas of Application

SikaTack[®] Ultrafast US is suitable for direct glazing applications in vehicle assembly and general purpose structural bonding applications of components within an automated production process.

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.



SikaTack[®] Ultrafast US 1/3

Cure Mechanism



Diagram 1: Curing speed SikaTack[®] Ultrafast US

SikaTack[®] Ultrafast US utilizes a dual curing system. The material is pre-gelled by heat which gives it the unique high initial strength and unsurpassed non-sag properties. Final cure is through ambient moisture.

Method of Application

Substrate

Surfaces must be clean, dry and free from all traces of grease, oil, wax and dust and be of sound quality.

Priming

Pretest substrates for adhesion. Cleaners and/or primers may be required to achieve optimal adhesion. Please refer to the Surface Preparation Guidelines for specific application information can be obtained at <u>www.sikausa.com</u> or by contacting the Technical Service Department of Sika Corporation via e-mail at tsmh@us.sika.com

Application

It is very important that SikaTack[®] Ultrafast US be applied within the recommended temperature range of 158°F - 194°F (70°C - 90°C). Ideal recommended temperature is 175°F (80°C). Material applied at temperatures outside this recommended range can result in less than optimal adhesion results and poor application characteristics including poor gunnability, excessive stringiness, poor sag resistance and poor bead stability. SikaTack® Ultrafast US is dispensed heated, straight from drums by means of a pneumatic or hydraulic pump system, or from cartridges following heating in a Sika approved oven for a minimum of 1 hour, but not for more than 10 hours. For advice on selecting and setting up a suitable pump system for bulk applications please contact the System Engineering Department of Sika Industry.

The recommended application configuration of this material is in a V notch bead to assure proper surface contact with both substrates, (see Figure 1) where 2H =approximate depth of joint, and H =the compressed adhesive thickness following bonding.



Removal

Uncured SikaTack[®] Ultrafast US may be removed from tools and equipment with mineral spirits or another suitable solvent. Strictly follow solvent manufacturer's instructions for use and warnings. Do not use any alcohol based liquids. Once cured, the material can only be removed mechanically. Hands and exposed skin should be washed immediately using a suitable industrial hand cleanser and water. Do not use solvents on skin!

Overpainting

SikaTack[®] Ultrafast US can be overpainted. The paint must be tested for compatibility by carrying out preliminary trials. Baked enamels should not be applied to SikaTack[®] Ultrafast US until the sealant has attained full cure. It should be understood that the hardness and film thickness of the paint may impair the elasticity of the sealant and lead to cracking of the paint film.

Limitations

- Do not apply in the presence of curing silicone

 Contact with alcohol or alcoholcontaining solvents will prevent curing

- Lower humidity levels will extend cure time
- For best results use opened cartridges the same day
- When applying adhesive avoid air entrapment
- Do not use on polyethylene, polypropylene, silicone, PTFE and certain plasticized resins (Consult our Technical Services Department for advice)
- Always use a piston type applicator (battery powered or manual) to apply cartridge product; pneumatic guns typically do not generate sufficient power

CAUTION: Irritant; Sensitizer: Contains polvisocvanate prepolymer, xylene. May cause skin/eye/respiratory irritation. May cause skin and/or respiratory sensitization after prolonged or repeated contact. Avoid contact. Xylene may cause headaches, dizziness or other CNS effects; and may cause liver or kidney effects. Use only with adequate ventilation. Use of safety goggles and chemical resistant gloves is recommended. In case of PEL's being exceeded, use an appropriate, properly fitted NIOSH/MSHA approved respirator.

HMIS

Health	*3
Flammability	1
Reactivity	0
Personal Protection	Х

First Aid Measures

In case of skin contact, wash immediately and thoroughly with soap and water. If symptoms persist, consult physician. For eye contact, flush immediately with plenty of water for at least 15 minutes, contact a physician. For respiratory problems, remove person to fresh air; if symptoms persist, contact a physician. In case of ingestion, dilute with water and consult physician. Remove contaminated clothing.



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

Further information available at:

www.sikausa.com



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.

Further Information

Copies of the following publications are available on our website <u>www.sikausa.com</u>:

-Material Safety Data Sheets -Product Data Sheet -Sika Primer Chart -General guidelines for bonding and sealing with Sika products In case of emergency call: Chemtrec: 800-424-9300 International: 703-527-3887

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

Packaging Information

Cartridge	300ml (10.1 ounce)
Drum	200 L (52.8 gal)

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.

Storage and Handling

Do not store near excessive heat. Store in tightly closed containers. For maximum shelf life, store unopened product at or below 75°F (24°C). 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 launder before reuse.

Clean Up

Uncured SikaTack[®] Ultrafast US may be removed from tools and equipment with mineral spirits. Once cured, the material can only be removed mechanically. Hands and exposed skin should be washed immediately using a suitable industrial hand cleanser and water. Do not use solvents on skin!

In case of spills or leaks, ventilate area, avoid contact, wear suitable protective equipment, contain spill, collect with absorbent material, and transfer to suitable container. Dispose of in accordance with current, 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 OTHER INTELLECTUAL ANY 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 information, of such 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 <u>www.sikausa.com</u> 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.sikausa.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.



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

Further information available at:

www.sikausa.com



SikaTack[®] Ultrafast US 3 / 3